DOCUMENT RESUME

ED 051 545	EA 003 492
TITLE	School Consolidation Survey: Iredell County: Mooresville, Statesville, North Carolina.
INSTITUTION	Engelhardt and Engelhardt, Inc. Purdy Station, New York.
PUB DATE	Jun 70
NOTE	319p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$13.16
DESCRIPTORS	Administrative Organization, *Consolidated Schools, *Construction Needs, Educational Facilities, Educational Finance, Educational Needs, *Enrollment Projections, Facility Requirements, *Feasibility Studies, Growth Patterns, *Personnel Needs, Population Growth, School Support, Vocational Education
IDENTIFIERS	Iredell County North Carolina

ABSTRACT

This document explores the feasibility of consolidating three North Carolina school districts into a single administrative unit. Factors analyzed include future population and enrollment growth, existing buildings and school building needs, program offerings, staff qualifications, administrative organization, and financial considerations of consolidation. An addendum surveys countywide vocational education programs. (Maps on pages 37, 38, 41, 76, 87, 273, and 274 may reproduce poorly.) (LLR)

ED051545

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

SCHOOL CONSOLIDATION SURVEY

Iredell County
Mooresville
Statesville

North Carolina

June 1970

EA 003 492

Engelhardt and Engelhardt, Inc., Educational Consultants
Purdy Station, Westchester County, New York

BOARD OF IREDELL COUNTY COMMISSIONERS

F. M. Steele, Chairman
C. Chandler Bryan, Vice Chairman
Dr. John S. Hardaway
John B. Simpson
James M. White

IREDELL COUNTY BOARD OF EDUCATION

C. Wilson White, Chairman
James Vanstory, Vice Chairman
C. B. (Sam) Brown
A. C. Holthouser
J. Oscar Stradley

T. Ray Gibbs
Superintendent of Schools
W. T. Poston
Assistant Superintendent

MOORESVILLE BOARD OF EDUCATION

E. E. Cruse, Jr., Chairman
George W. Brawley, Jr.
William K. Harwell
Mrs. Jack Jefford
Dr. Calvin E. Tyner

Dr. Roland R. Morgan
Superintendent of Schools

STATESVILLE BOARD OF EDUCATION

Nathan McElwee, Chairman
Cecil K. Barger, Vice Chairman
Dr. Ralph L. Bentley
Dr. F. Glenn Gaither
J. Edwin Hunter
Mrs. Kathleen T. Johnston

A. D. Kornegay
Superintendent of Schools
Alan D. Rutherford
Assistant Superintendent

PREFACE

The purpose of this study is to assist the County Commissioners and the Board of Education of Mooresville, Statesville, and Iredell County, and the citizens of these communities in determining whether or not the three school districts should be consolidated into a single administrative unit. In order to accomplish this purpose, the consultants have studied future population and enrollment growths, the existing buildings and school building needs, program offerings, staff qualifications, administrative organization, and the financial considerations of consolidation.

This report is a condensation of the data and their analysis as developed by the consultants. Chapter I reviews the growth pattern of Iredell County and contains the projected enrollment growth anticipated in each of the three school districts. All of this material was developed with the close cooperation of the Educational Advisory Committee, with whom the consultants met on many occasions. The Educational Advisory Committee was particularly helpful in developing an analysis of major growth areas in the County. All the data relating to past school enrollments were obtained through the cooperation of the superintendents.

The second chapter contains a review and analysis of elementary facilities available to children through all three districts. The third chapter deals with secondary school facilities. The central staffs of the school districts and individual building principals were most gracious in accompanying us while inspecting the buildings and in offering helpful comments and suggestions concerning the school plant.

The fourth chapter brings together some data and considerations regarding the enrollments as projected in Chapter I and the school facilities as discussed in Chapters II and III. School building needs for each independent unit and for a consolidated administrative unit are discussed. Also included in this chapter are estimated costs to meet the school building needs. School building needs have been discussed with the Advisory Committee.

Chapter V contains a comparative analysis of staff of the three districts. The implications of some of the differences found are discussed.

The sixth chapter is devoted to an analysis of administrative needs for a consolidated County system. Recommendations for potential staffing and job descriptions are included.

The seventh chapter is concerned with financial considerations of the proposed consolidation. It is important to note that the laws of North Carolina do nothing to encourage consolidation from a financial point of view. Certainly they do not offer anything even remotely akin to the financial incentives for schoolhouse construction and operating aid provided to newly centralized districts in New York State.

Chapter VIII contains the recommendations of consultants. Also found in this chapter along with the recommendations is a discussion of the benefits of consolidation. To bring the long report into sharper focus, there is included therein a summary of major recommendations.

4

A final section or addendum contains a review and analysis of vocational education throughout the County. It has been thoroughly reviewed with the Vocational Committee and with the Educational Advisory Committee.

The consultants have enjoyed the complete cooperation of many people in the preparation of this report. It would be impossible to name all of the people in the State Department of Education and staff members in the local systems who gave so generously of their time and energy to further this study. However, we would like to give particular recognition to the three school superintendents who were especially helpful in all aspects of the study.

Dr. Roland Morgan - Mooresville
Mr. A. T. Kornegay - Statesville
Mr. T. Ray Gibbs - Iredell County

We would also like to thank members of the Educational Advisory committee who met with us to review and react to portions of our study: Messrs. J. C. Austell, Jr., Cecil Barger, C. C. Bryan, H. E. Dickerson, Wayne Franklin, Jack Jefford, R. L. Shuford, J. Oscar Stradley, A. J. Waring, W. G. Young.

TABLE OF CONTENTS

Page

PREFACE i

I GROWTH OF THE DISTRICT AND ESTIMATES OF SCHOOL MEMBERSHIP 1
  Growth Potential of the Community and Its Effect upon Public School Education 1
  Annexation 4
  Estimates of Future Membership, Iredell County School System 4
    Estimates by Area 4
    Past School Membership 4
    Grade-to-Grade Movement 6
    Births 8
    Kindergarten 12
    Special Classes 12
    Estimates of Future Membership 13
  Estimates of Future Membership, Mooresville City Schools 17
    Past School Membership 17
    Grade-to-Grade Movement 19
    Births 20
    Kindergarten and Special Classes 20
    Estimates of Future Membership 20
  Estimates of Future Membership, Statesville City Schools 25
    Past School Membership 25
    Grade-to-Grade Movement 27
    Nonresident Pupils 28
    Births 28
    Kindergarten and Special Classes 29
    Estimates of Future Membership 29
  Estimates of Future Membership, Consolidated County School System 33
  Geographical Distribution of Public School Enrollments, Present and Projected 35

II EXISTING FACILITIES - ELEMENTARY SCHOOLS 40
  Iredell County 40
    Amity Hill 43
    Brawley 46
    Celeste Henkel 50

TABLE OF CONTENTS
(continued)

Page

Central 52
Cool Spring 54
Ebenezer 56
Harmony 57
Monticello 59
Mt. Mourne 61
Scotts 63
Sharon 64
Shepherd 65
Troutman Elementary 67
Troutman Junior High 68
Union Grove 69
Wayside 70
East School 72
Summary - Iredell County Elementary Schools 73
Mooresville 75
Parkview 77
South School 80
Dunbar School 82
Summary - Mooresville Elementary Schools 85
Statesville 86
Avery Sherrill 88
Morningside 90
Mulberry Street 92
N. B. Mills 94
Northview 96
Pressly 98
School Administrative Center 100
Summary - Statesville Elementary Schools 101

III EXISTING FACILITIES - SECONDARY SCHOOLS 102
Iredell County Schools 104
North Iredell High School 104
General Notes 104
Athletic Program 106
Occupational Education 107
Science Department 111
Fine Arts, Music 112

TABLE OF CONTENTS
(continued)

Page

        Other Areas 112
        Library and Other Common Facilities 113
    South Iredell High School 114
        General Notes 114
        Athletic Program 116
        Occupational Education 117
        Science Department 119
        Fine Arts, Music 121
        Other Areas and General Comments 122
        Library and Other Common Facilities 123
Mooresville City Schools 124
    Mooresville High School 124
        General Notes 124
        Athletic Program 126
        Occupational Education 126
        Science Department 128
        Fine Arts, Music 130
        Other Areas 130
        Library and Other Common Facilities 131
    Mooresville Junior High School 132
Statesville City Schools 135
    Statesville Senior High School 135
        General Notes 135
        Athletic Program 137
        Occupational Education 139
        Science Department 140
        Fine Arts, Music 140
        Other Areas 142
    D. Matt Thompson Junior High School 143
    Oakwood Junior High School 146
Special Education in Secondary Schools 148

IV SCHOOL BUILDING NEEDS 151
Enrollments and Capacities - Elementary Schools 151
    Iredell County School District 151
    Mooresville School District 153
    Statesville School District 155

TABLE OF CONTENTS
(continued)

Page

Enrollments and Capacities - Secondary Schools 157
    Iredell County School District 157
    Mooresville School District 157
    Statesville School District 157
School Building Needs 162
    Iredell County School District 162
    Mooresville City School District 163
    Statesville City School District 164
    The Consolidated Iredell County School District 165
Estimated Costs of Construction 166
    Iredell County School District 167
    Mooresville City School District 167
    Statesville City School District 167
    Consolidated Iredell County School District 168

V STAFFING THE SCHOOLS 170
    Elementary Teachers 170
    Secondary Teachers 172

VI ADMINISTRATIVE ORGANIZATION 175
    Central Office Administration 175
    Superintendent 176
    Assistant Superintendent for Instruction 176
    Directors of Elementary and Secondary Education 177
    Curriculum Specialists 177
    Other Specialists 178
    Part-Time Supervisors 179
    Personnel 179
    Job Descriptions 180
    Business Management and Administrative Services 204
    Centralized Business Management and Administrative Services 204
    Functional Organization - Administrative Services 206
    Long-Range Planning and Budgeting 209
    Internal Audit 212
    Accounting Practice and Procedures 213
    Maintenance of Buildings, Grounds, and Equipment 214
    Business Education and Computer Technology 219

TABLE OF CONTENTS
(continued)

Page

VII FINANCIAL CONSIDERATIONS 221
  Special State Aid for Consolidation 221
  Ability to Support Education 222
  Revenue and Current Operating Expenditures 226
  Quality Education 230
  Consolidation and Equalization of Tax Effort 234
  Costs and Tax Rate Under Consolidation 235
  A Gradual Equalization 236
  Capital Outlay 240

VIII ANALYSIS AND RECOMMENDATIONS 243
  Consolidation - Educationally Desirable 243
  Advantages of Larger School Districts 243
  Implications for Iredell 245
  Consolidation - Financially Desirable 252
  Other Benefits of Consolidation 254
  Summary of Major Recommendations 256

APPENDIX - VOCATIONAL EDUCATION 260
  Do We Need Vocational Education? 261
  What Philosophy of Vocational and Industrial Arts Education is Appropriate? 265
  What Type of Facility is Appropriate? 271
  What Types of Courses Are Recommended? 275
  Introductory or Survey Courses 276
  Exploratory Courses (Tenth Grade) 278
  Specialization Courses and Clusters 279
    Human Services Cluster 280
    Textile Cluster 281
    Agricultural Cluster 284
    Automotive Industry 286
    Machinist Training and Machine Drafting 288
    Drafting and Design Curriculum 289
    Construction Trades Cluster 292
    Cabinetmaking, Custom Carpentry 293
    Small Appliance, Heating, Ventilating, and Air Conditioning Service Cluster 294
    Distributive Education 296

TABLE OF CONTENTS
(continued)

Page

Business and Office Education Cluster 296
Home Economics Cluster 298
Implementation of an Occupational Program 299
Summary and Implications for Consolidation 301

TABLE OF CONTENTS
(continued)

Page

TABLES

		Page
1	Estimated Membership in Grades 1-12 by Area - Iredell County School System	5
2	Membership by Grades - Iredell County School System	6
3	Grade-to-Grade Movement - Iredell County School System	7
4	Live Births to Residents of Iredell County, excluding Mooresville and Statesville	9
5	Estimates of Future Membership by Grades - Iredell County School System	14
6	Estimates of Future Membership by Grade Groups - Iredell County School System	15
7	Membership by Grades - Mooresville City Schools	18
8	Grade-to-Grade Movement - Mooresville City Schools	19
9	Live Births to Residents of Mooresville	21
10	Estimates of Future Membership by Grades - Mooresville City Schools	22
11	Estimates of Future Membership by Grade Groups - Mooresville City Schools	23
12	Membership by Grades - Statesville City Schools	26
13	Grade-to-Grade Movement - Statesville City Schools	27
14	Live Births to Residents of Statesville	29
15	Estimates of Future Membership by Grades - Statesville City Schools	30
16	Estimates of Future Membership by Grade Groups - Statesville City Schools	31
17	Estimates of Future Membership by Grade Groups - Consolidated County School System	34
18	Geographical Distribution of School Membership - Iredell County, Mooresville, and Statesville	36
19	Capacities and Enrollments - Iredell County Schools - Elementary	42
20	Capacities and Enrollments - Mooresville City Schools - Elementary	75
21	Capacities and Enrollments - Statesville City Schools - Elementary	86
22	Capacity of North Iredell High School	105
23	Capacity of South Iredell High School	115
24	Capacity of Mooresville High School	125
25	Capacity of Mooresville Junior High School	132
26	Capacity of Statesville Senior High School	136
27	Capacity of D. Matt Thompson Junior High School	143
28	Capacity of Oakwood Junior High School	146
29	Comparison of Spaces and Costs for New Facilities	169
30	Distribution of Elementary Teachers by Certification	171
31	Distribution of Secondary Teachers by Certification	173

TABLE OF CONTENTS
(continued)

Page

TABLES

32 Actual and Projected Assessed Valuations 224
33 State Nine Months' School Fund Index Salary Schedule for 1970-71, Classroom Teachers, 9-1/4 Months' Employment 228
34 Annual Supplement for Teachers 229
35 Per Pupil Expenditure, All Sources, by Administrative Units 1966-67 230
36 Per Pupil Expenditures, All Sources, by Administrative Units 1967-68 231
37 Per Cent of Classroom Teachers with Graduate Certificates 231
38 Per Cent of Professional Staff with Other Than "A" or "G" Certificates 232
39 Pupil-Staff Ratio 232
40 Number of Library Books per Pupil Enrolled 233
41 Per Cent of High School Graduates Entering College 233
42 Supplemental Tax Rates for Current Expenditures 238
43 Amount Raised per Capita and Tax Rates 240
44 Allotment of Capital Outlay Funds 241
45 Number of Selected Courses in Selected Schools 251
46 Secondary Student Enrollment in Vocational Courses - Iredell Compared to Other Areas 261
47 Per Cent of Dropouts from Grades 8-12 264

MAPS

1 Per Cent of Residential Growth per Year within Decade 2
2 Percentage Distribution of Total Public School Enrollment 1969-70 37
3 Percentage Distribution of Total Public School Enrollment 1980-81 38
4 Locations of Existing Schools - Iredell County 41
5 Locations of Existing Schools - Mooresville 76
6 Locations of Existing Schools - Statesville 87
7 Centralized Advanced Facility Plan for Occupational Education 273
8 Decentralized Advanced Facility Plan for Occupational Education 274

TABLE OF CONTENTS
(continued)

Page

CHARTS

1	Live Births to Residents - Iredell County, Mooresville, Statesville	10
2	Total Live Births to Residents of Iredell County	11
3	Membership in Grades 1-12 - Iredell County	16
4	Membership in Grades 1-12 - Mooresville	24
5	Membership in Grades 1-12 - Statesville	32
6	Capacities and Projected Elementary Enrollments - Iredell County	152
7	Capacities and Projected Elementary Enrollments - Mooresville	154
8	Capacities and Projected Elementary Enrollments - Statesville	156
9	Capacities and Projected Secondary Enrollments - Iredell County	159
10	Capacities and Projected Secondary Enrollments - Mooresville	160
11	Capacities and Projected Secondary Enrollments - Statesville	161
12	Suggested Administrative Organization of a Consolidated District	181
13	Functional Organization - Administrative Services	207
14	Planning is a Continuous Process	211
15	Actual and Projected Assessed Valuations	225
16	Per Cents of Student Body with Various Goals for the Future	268
17	Drafting and Design Curriculum	291

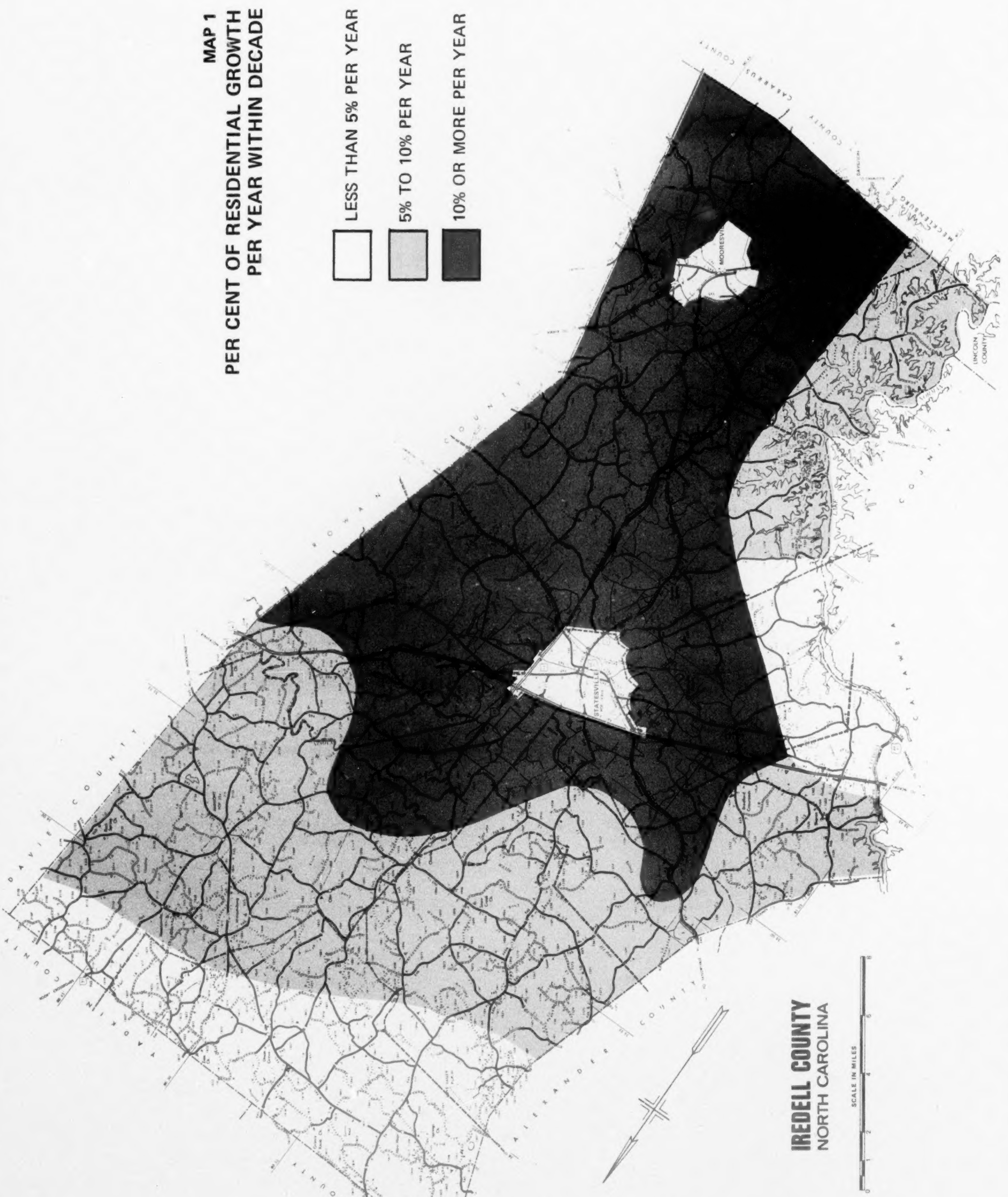
GROWTH OF THE DISTRICT AND ESTIMATES OF SCHOOL MEMBERSHIP

Growth Potential of the Community and Its Effect Upon Public School Education

The primary factors affecting the growth of the community as it pertains to public education and student enrollments are delineated as follows:

1. Suitability of the area for industrial and residential growth
2. The geographical location of the area in relationship to surrounding Piedmont centers of industrial and residential activity
3. The location within the area of vigorous industrial and commercial activity
4. The bisection of the County by Interstate 40
5. The probability of an extension of Interstate 77 north with its attendant favorable growth effect.
6. An unfavorable factor affecting growth appears to be a shortage of competent labor. A vigorous vocational education program in the public schools would aid in the alleviation of this problem.

Map 1 following depicts probable growth areas within the County. The boundary determinations represent the best judgment of the Consultants and knowledgeable members of the community, including the members of the Educational Advisory Committee appointed by the County Commissioners.



MAP 1

PER CENT OF RESIDENTIAL GROWTH PER YEAR WITHIN DECADE

☐ LESS THAN 5% PER YEAR

▨ 5% TO 10% PER YEAR

■ 10% OR MORE PER YEAR

IREDELL COUNTY
NORTH CAROLINA
SCALE IN MILES
0
2
4
6
8
STATESVILLE
MOORESVILLE
DAVIE COUNTY
YADKIN COUNTY
WILKES COUNTY
ALEXANDER COUNTY
CATAWBA COUNTY
LINCOLN COUNTY
MECKLENBURG COUNTY
CABARRUS COUNTY
ROWAN COUNTY

On Map 1, shaded areas represent varying degrees of growth potential in terms of residential housing and attendant increase in population and student enrollments during the next decade.

It is the general consensus that areas of growth should be delineated as follows:

1. The area immediately adjacent to Lake Norman considered in relation to growth in student enrollment appears to present moderate growth potential owing to its probable utilization as a retirement and vacation area.

2. The cities of Statesville and Mooresville fall into a less rapid rate of growth category by reason of a relatively small number of desirable residential building sites compared to their present populations.

3. The extreme northern portion of the County appears to be an area of minimal residential growth because of characteristics of terrain and general accessibility, although the construction of Route 77 north may eventually alter this trend.

4. The area surrounding the city of Statesville, including Troutman and south to the County line, appears to have the greatest potential for residential growth.

It is anticipated that growth will occur during the next decade at a gradually increasing rate and will not hit peak percentages shown on the map until about 1979.

Annexation

The membership projections in this report indicate the school population anticipated within the boundaries of the present school districts. Of course, if Statesville annexes more area, the membership in the schools, rather than decreasing, could increase. If Mooresville School District annexes more land area, its membership can also be expected to be higher than projected. Annexation by the cities could result in lower memberships in the County's schools than have been projected.

Estimates of Future Membership, Iredell County School System

Estimates by Area

Table 1 shows the estimated membership in grades one through twelve, by areas in the County, for each year from 1970-71 through 1980-81, assuming that growth in number of pupils follows the pattern indicated in Map 1.

Past School Membership

This implies that growth in the future will be much greater than it has been in the recent past. Table 2 shows the membership, by grades, in County system schools from 1965-66 through 1969-70. Although the total number of pupils has increased 10 per cent in the past five years, increases due to migration into the County are negligible. For example, there were 851 pupils in grade three in 1965-66; the same class, now grade seven, has 852 pupils in 1969-70. In most cases, gains and losses have been fairly well balanced as classes move through the school system; the result is that net gains, if any, have been small.

Table 1
ESTIMATED MEMBERSHIP IN GRADES 1-12 BY AREA
IREDELL COUNTY SCHOOL SYSTEM
1969-70 through 1980-81

	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Amity	459	461	466	471	485	500	525	551	590	631	675	742
Brawley	313	315	318	321	327	334	344	354	368	383	402	426
Celeste Henkel	672	675	682	689	703	717	739	761	791	823	856	899
Central	597	600	606	612	624	636	649	668	688	709	737	766
Cool Springs	702	706	713	720	734	749	771	794	834	876	920	994
Ebenezer	480	482	487	492	507	522	548	575	615	658	704	774
Harmony	1,067	1,072	1,083	1,094	1,116	1,138	1,172	1,207	1,255	1,305	1,370	1,449
Monticello	961	966	976	986	1,016	1,046	1,098	1,153	1,234	1,320	1,412	1,553
Mt. Mourne	458	460	465	470	479	489	509	529	561	595	631	688
Scotts	479	481	486	491	501	511	526	542	564	587	616	652
Sharon	388	390	394	398	406	414	422	435	448	461	479	498
Shepherd	508	511	516	521	537	553	581	610	653	699	748	823
Troutman	1,163	1,169	1,181	1,193	1,217	1,241	1,278	1,316	1,382	1,451	1,524	1,646
Union Grove	538	541	546	551	557	563	574	585	597	609	627	646
Wayside	1,181	1,187	1,199	1,211	1,247	1,284	1,348	1,415	1,514	1,620	1,733	1,906
County Total:	9,966	10,016	10,118	10,220	10,456	10,697	11,084	11,495	12,094	12,727	13,434	14,462

Table 2
MEMBERSHIP BY GRADES
IREDELL COUNTY SCHOOL SYSTEM
1965-66 through 1969-70

Year	1	2	3	4	5	6	7	8	9	10	11	12	Sp.	Total
1965-66	853	822	851	862	799	753	747	813	793	645	542	539	65	9,084
1966-67	935	821	806	815	883	765	771	726	799	718	539	489	90	9,157
1967-68	1,016	888	827	829	851	871	806	767	802	732	584	483	128	9,584
1968-69	957	946	856	849	835	824	875	737	803	703	605	543	127	9,660
1969-70	1,014	938	943	897	864	874	852	849	903	697	594	541	57	10,023

Grade-to-Grade Movement

Table 3 shows percentages of grade-to-grade movement at present - i.e., the 1965-69 average. Percentages greater than 100 indicate gains in number of pupils from one grade to the next. In some cases, these gains are the result of movement into the County of families with children of school age; other gains appear to be the result of requiring some pupils to repeat certain grades. Similarly, percentages less than 100 indicate losses, some of which may indicate migration out of the County; others are the result of promotion policies. Low percentages in the high school grades indicate dropouts: students who leave school before completion of their education. Although one-year percentages are not conclusive, those for the period from fall of 1968 to fall of 1969 are, in most cases, as high as the four-year average and, in a few cases, higher, possibly indicating that growth has already started to accelerate.

Table 3
GRADE-TO-GRADE MOVEMENT
IREDELL COUNTY SCHOOL SYSTEM

From Grade	To Grade	Per Cent Present*	Per Cent Future**
1	2	96	105
2	3	99	108
3	4	101	110
4	5	102	111
5	6	99	108
6	7	103	107
7	8	96	101
8	9	109	109
9	10	89	94
10	11	83	91
11	12	91	95

*1965-69 average
**By 1980-81

Also shown in Table 3 are the percentages to be expected if school membership increases at the rate shown in Table 1. In calculating the future membership shown in Tables 5 and 6, the present percentages have been used for the next two years; beginning in 1972-73, allowance has been made for increases in migration each year until 1980-81 in grades two through eight. It has also been assumed that, as a result of improved vocational programs, there will be decreases in the percentage of high school students who drop out of school in 1973-74 and later years.

Births

Why has the total school membership been increasing so fast, despite low inmigration rates, and why will this not continue? The answer lies in the birth rate. Table 4 shows births to residents of the County, exclusive of the two cities, from 1959 through 1968. This information is also shown graphically in Chart 1. Chart 2 shows the total births for Iredell County, including the cities. The number of births rose each year from 1959 through 1962 and then, following the national trend, declined. Most children who entered grade one in the years from 1966-67 through 1969-70 were born between 1960 and 1963, when birth rates were at their peak; children who will be entering first grade in the years from 1970-71 through 1974-75 were born in the years from 1964 through 1968, when birth rates were much lower. Thus, the number of children in grade one in the years immediately ahead is expected to be lower than in the recent past; with no increase in migration into the County, a decline in membership in elementary grades could also be expected. This would mean that total membership in grades one through twelve would remain at or below 10,300 for the greater part of the decade.

With increased migration, however, the decline in number of pupils in grade one should be less than it would otherwise be, and a return to the present figure of 1,000 is predicted by 1976-77. Further migration should lead to further increases in the number of births as well as the number of children moving in; accordingly the estimates shown later in Table 5 allow for a steady increase in the first grade membership from 1974-75 on.

Table 4

LIVE BIRTHS TO RESIDENTS OF IREDELL COUNTY EXCLUDING MOORESVILLE AND STATESVILLE

1959 through 1968

Year	County Only
1959	779
1960	832
1961	850
1962	870
1963	802
1964	792
1965	712
1966	722
1967	696
1968	699

Source: Public Health Statistics Section, North Carolina State Board of Health, 1/20/70

CHART 1
LIVE BIRTHS TO RESIDENTS
IREDELL COUNTY, MOORESVILLE, AND STATESVILLE, 1959–1968

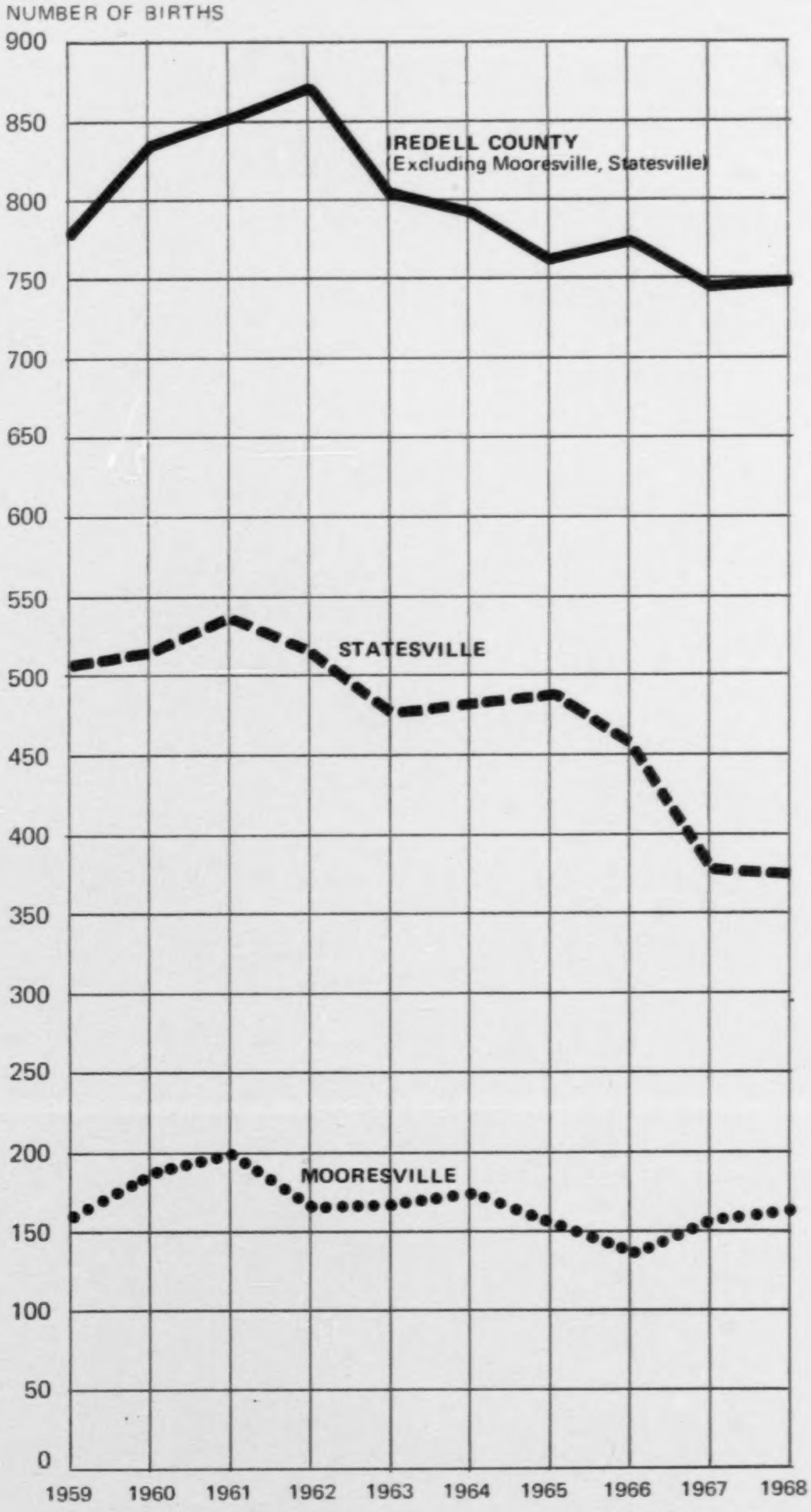
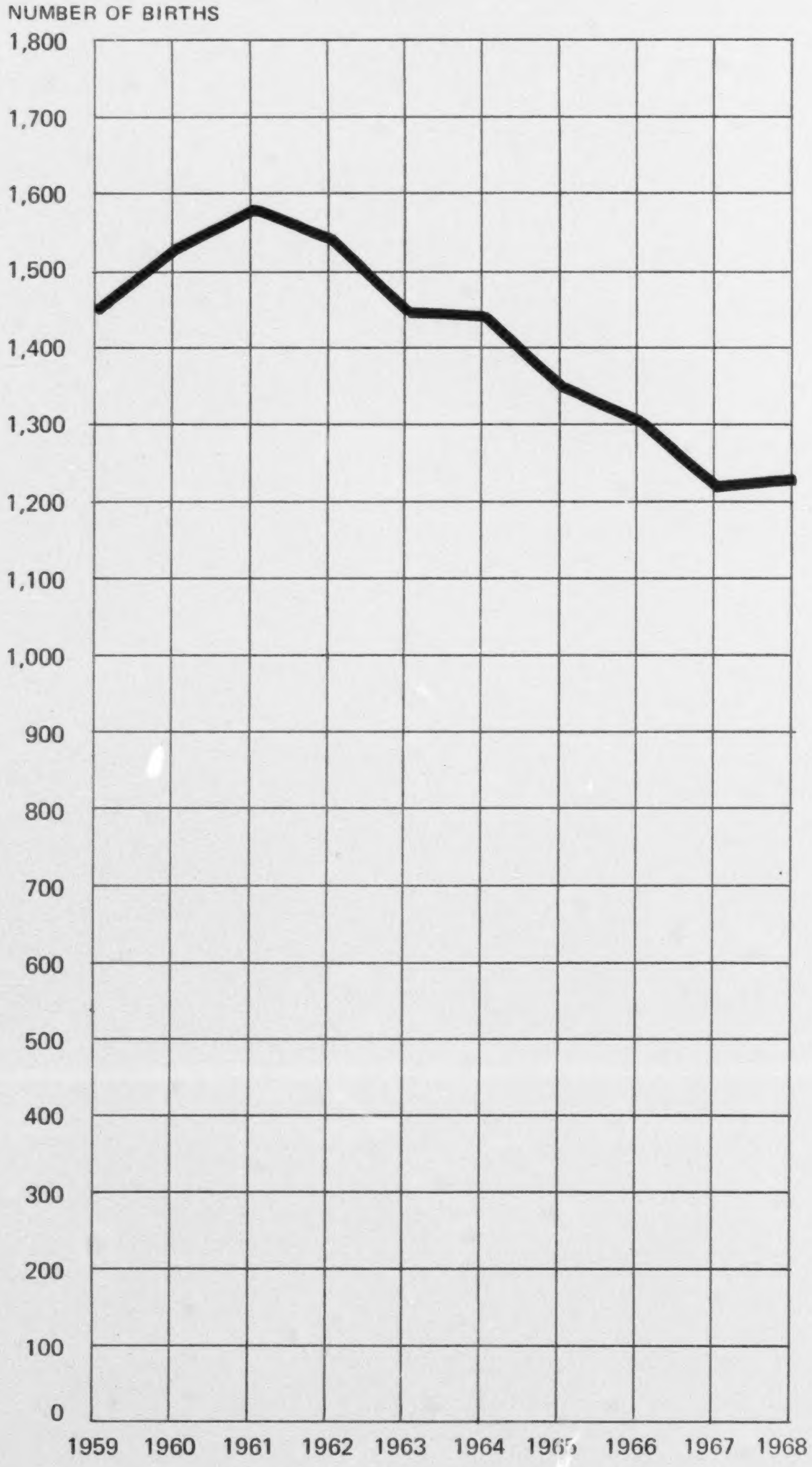


CHART 2

TOTAL LIVE BIRTHS TO RESIDENTS OF IREDELL COUNTY

1959–1968



Kindergarten

Since the County schools do not now have kindergartens, it is difficult to say how many children will attend these classes when they are instituted or what effect this will have on the number of children in first grade. It has been our experience that kindergartens, for the first year or two, usually have a smaller percentage of the five-year-olds in the community than they will have later. Some children go directly into first grade without attending kindergarten, although this percentage tends to decrease. At the same time, there tends to be a reduction in the percentage of children repeating first grade and thus a reduction in the first grade membership.

It is, of course, impossible to calculate in advance the exact effect of these tendencies in any given year. For the purpose of planning facilities needed, kindergarten has been estimated at 90 per cent of the corresponding first grade membership. It is possible, however, that, as kindergarten becomes well established, membership in kindergarten will be somewhat higher, and in first grade somewhat lower, than the estimates show.

Special Classes

The number of children in special classes has varied from a high of 128 in 1967-68 to a low of 57 in 1969-70. On the basis of average trends in the past four years, we would expect the total number of these classes in the future to range from about 100 to about 150. Actually, of course, the number of children assigned to these classes represents an administrative decision. Should the number be increased substantially, we would expect an equivalent reduction in the number of children in graded classes.

Estimates of Future Membership

Tables 5 and 6 show anticipated membership from 1970-71 through 1980-81 by grades and grade groups. Because the method of estimating was different, it proved impossible to make these estimates for grades one through twelve match exactly those in Table 1. The totals in Table 6 show a similar pattern of growth but are slightly higher. Estimates for grade one through twelve from Table 6 are shown graphically in Chart 3.

Table 5
ESTIMATES OF FUTURE MEMBERSHIP BY GRADES
IREDELL COUNTY SCHOOL SYSTEM
1970-71 through 1980-81

Year	1	2	3	4	5	6	7	8	9	10	11	12	Sp.	1-12 & Sp.
1969-70	1,014	938	943	897	864	874	852	849	903	697	594	541	57	10,023
1970-71	950	973	929	952	915	855	900	818	925	804	579	541	107	10,248
1971-72	869	912	963	938	971	906	881	864	892	823	667	527	108	10,321
1972-73	895	843	912	982	966	971	933	855	942	794	683	607	110	10,493
1973-74	877	877	851	939	1,021	976	1,010	905	932	848	667	628	111	10,642
1974-75	895	868	895	885	986	1,041	1,015	990	986	848	721	620	114	10,864
1975-76	950	895	894	940	938	1,016	1,093	995	1,079	907	729	678	118	11,232
1976-77	1,000	960	931	948	1,006	976	1,067	1,082	1,085	1,003	789	693	122	11,662
1977-78	1,075	1,020	1,008	996	1,024	1,056	1,034	1,056	1,179	1,020	883	750	128	11,229
1978-79	1,175	1,107	1,081	1,089	1,086	1,085	1,119	1,034	1,151	1,108	908	839	135	12,917
1979-80	1,300	1,222	1,184	1,178	1,198	1,162	1,161	1,119	1,127	1,082	997	863	144	13,737
1980-81	1,425	1,365	1,320	1,302	1,308	1,294	1,243	1,173	1,220	1,059	985	947	155	14,796

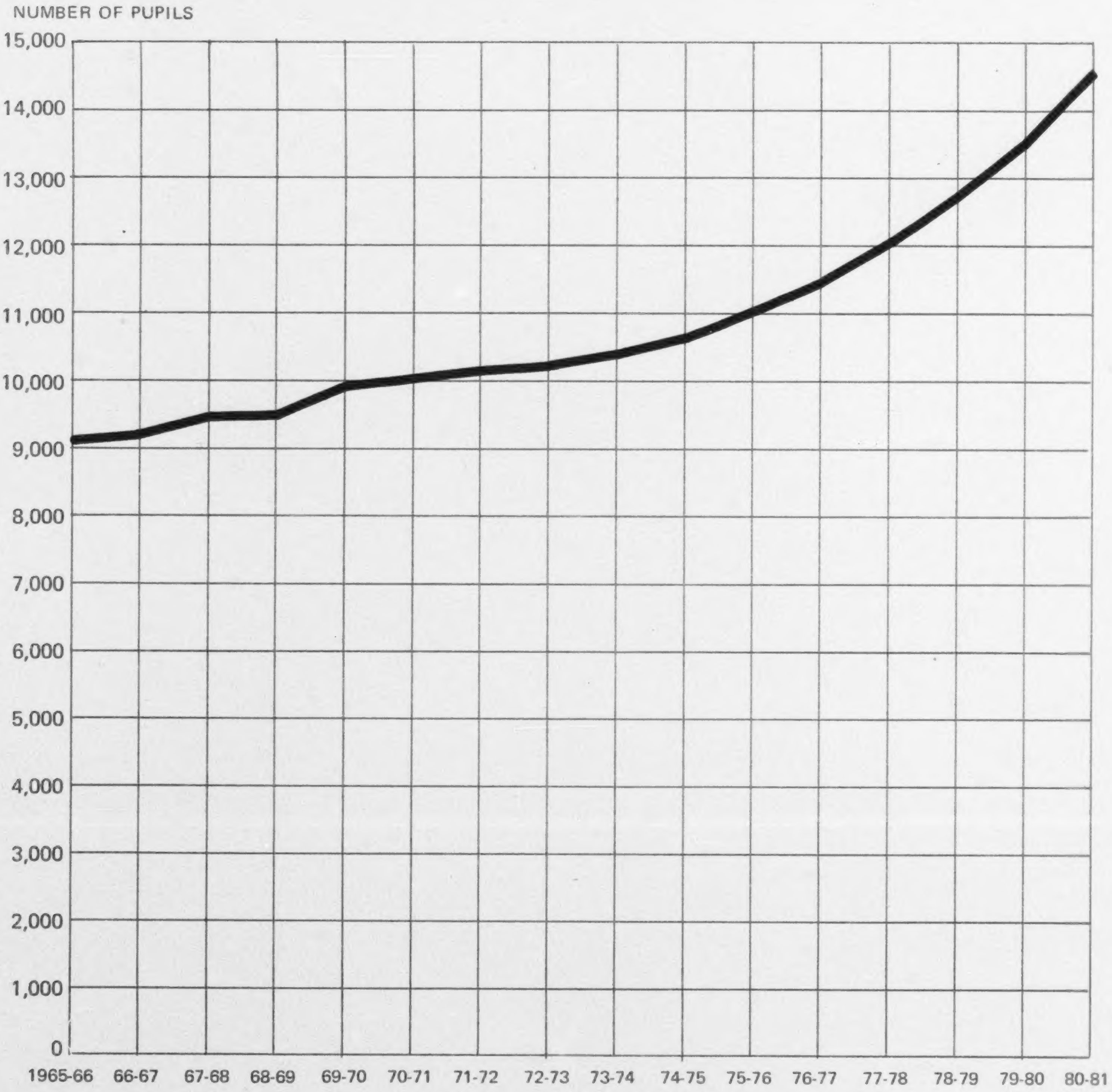
Enrollments for 1969-70 are actual.

Table 6
ESTIMATES OF FUTURE MEMBERSHIP, BY GRADE GROUPS
IREDELL COUNTY SCHOOL SYSTEM
1970-71 through 1980-81

Year	K	1-6	K-6	7-8	9-12	K-5	6-8	K-8	1-8	1-12	Special	Total*
1969-70	-	5,530	-	1,701	2,735	-	2,575	-	7,231	9,966	57	10,023
1970-71	782	5,574	6,356	1,718	2,849	5,501	2,573	8,074	7,292	10,141	107	11,030
1971-72	806	5,559	6,365	1,745	2,909	5,459	2,651	8,110	7,304	10,213	108	11,127
1972-73	789	5,569	6,358	1,788	3,026	5,387	2,759	8,146	7,357	10,383	110	11,282
1973-74	806	5,541	6,347	1,915	3,075	5,371	2,891	8,262	7,456	10,531	111	11,448
1974-75	855	5,570	6,425	2,005	3,175	5,384	3,046	8,430	7,575	10,750	114	11,719
1975-76	900	5,633	6,533	2,088	3,393	5,517	3,104	8,621	7,721	11,114	118	12,132
1976-77	968	5,821	6,789	2,149	3,570	5,813	3,125	8,938	7,970	11,540	122	12,630
1977-78	1,058	6,179	7,237	2,090	3,832	6,181	3,146	9,327	8,269	12,101	128	13,287
1978-79	1,170	6,623	7,793	2,153	4,006	6,708	3,238	9,946	8,776	12,782	135	14,087
1979-80	1,282	7,244	8,526	2,280	4,069	7,364	3,442	10,806	9,524	13,593	144	15,019
1980-81	1,400	8,014	9,414	2,416	4,211	8,120	3,710	11,830	10,430	14,641	155	16,196

* Except in 1969-70, total includes kindergarten.
Enrollments for 1969-70 are actual.

CHART 3
MEMBERSHIP IN GRADES 1–12
IREDELL COUNTY SCHOOLS



Estimates of Future Membership, Mooresville City Schools

As explained above, only minimal growth in school population is expected in the future within the present city limits of Mooresville, because of the shortage of lots for new residential construction. This is in line with current trends. Since, however, a portion of the school district is outside the city limits, in an area in which maximum future growth is anticipated, the estimates in Tables 10 and 11 allow for greater gains from inmigration than are now taking place.

Past School Membership

Table 7 shows membership in Mooresville City Schools, as of October, for the past five years. The total membership in grades one through twelve has increased by five per cent during this period.

Table 7
MEMBERSHIP BY GRADES
MOORESVILLE CITY SCHOOLS
1965-66 through 1969-70

Year	1	2	3	4	5	6	7	8	9	10	11	12	Total
1965-66	214	225	210	198	191	217	194	206	175	199	161	158	2,348
1966-67	234	222	221	219	193	194	231	196	193	168	176	142	2,389
1967-68	240	234	234	230	206	203	212	218	198	185	143	145	2,448
1968-69	240	229	220	221	225	201	210	197	213	182	166	120	2,424
1969-70	208	234	223	207	218	237	223	207	199	211	158	147	2,472

Grade-to-Grade Movement

Present percentages of grade-to-grade movement derived from the data in Table 7 are shown in Table 8. Also shown are anticipated percentages used in calculating future school membership. As in the case of the County schools, it has been assumed that there will be fewer high school dropouts in the future as a result of the provision of a wider variety of meaningful educational experiences.

Table 8
GRADE-TO-GRADE MOVEMENT
MOORESVILLE CITY SCHOOLS

From Grade	To Grade	Per Cent	
		Present*	Future**
1	2	99	102
2	3	99	102
3	4	99	102
4	5	97	100
5	6	102	105
6	7	107	110
7	8	97	100
8	9	98	100
9	10	96	97
10	11	88	92
11	12	86	94

*1965-69 average
**By 1974-75 except grade 12 which reaches its peak retention in 1978-79.

Births

As Chart 1 and Table 9 indicate, the number of births to Mooresville City residents reached a peak in 1961 and a low in 1966. As a result, it is expected that there will be fewer pupils in grade one in the years from 1971-72 through 1974-75 than there are now. With increased migration, however, first grade membership should rise, reaching 250 by the end of the decade.

Kindergarten and Special Classes

As in the case of the County schools, kindergarten has been estimated at 90 per cent of the next year's first grade and special classes at one per cent of total membership.

Estimates of Future Membership

Tables 10 and 11 show estimates of future school membership by grades and grade groups. Estimates for grades one through twelve are shown graphically in Chart 4.

Table 9
LIVE BIRTHS TO RESIDENTS OF MOORESVILLE
1959 through 1968

Year	Mooresville
1959	160
1960	187
1961	198
1962	165
1963	168
1964	172
1965	158
1966	138
1967	153
1968	161

Source: Public Health Statistics Section, North Carolina State Board of Health, 1/20/70

Table 10
ESTIMATES OF FUTURE MEMBERSHIP BY GRADES
MOORESVILLE CITY SCHOOLS
1970-71 through 1980-81

Year	1	2	3	4	5	6	7	8	9	10	11	12	Sp.	1-12 & Sp.
1969-70	208	234	223	207	218	237	223	207	199	211	158	147	16	2,488
1970-71	213	206	232	221	201	222	254	216	203	191	186	136	25	2,506
1971-72	198	211	204	230	214	205	238	246	212	195	168	160	25	2,506
1972-73	174	198	211	204	225	220	221	233	244	206	176	148	25	2,485
1973-74	193	174	198	211	200	232	238	217	231	237	187	157	25	2,500
1974-75	204	197	177	202	211	210	255	238	217	224	218	168	25	2,546
1975-76	215	208	201	181	202	222	231	255	238	210	206	198	26	2,593
1976-77	225	219	212	205	181	212	244	231	255	231	193	190	26	2,624
1977-78	235	230	223	216	205	190	233	244	231	247	213	179	26	2,672
1978-79	245	240	235	227	216	215	209	233	244	224	227	200	27	2,742
1979-80	255	250	245	240	227	227	236	209	233	237	206	213	28	2,806
1980-81	265	260	255	250	240	238	250	236	209	226	218	194	28	2,869

Enrollments for 1969-70 are actual.

Table 11

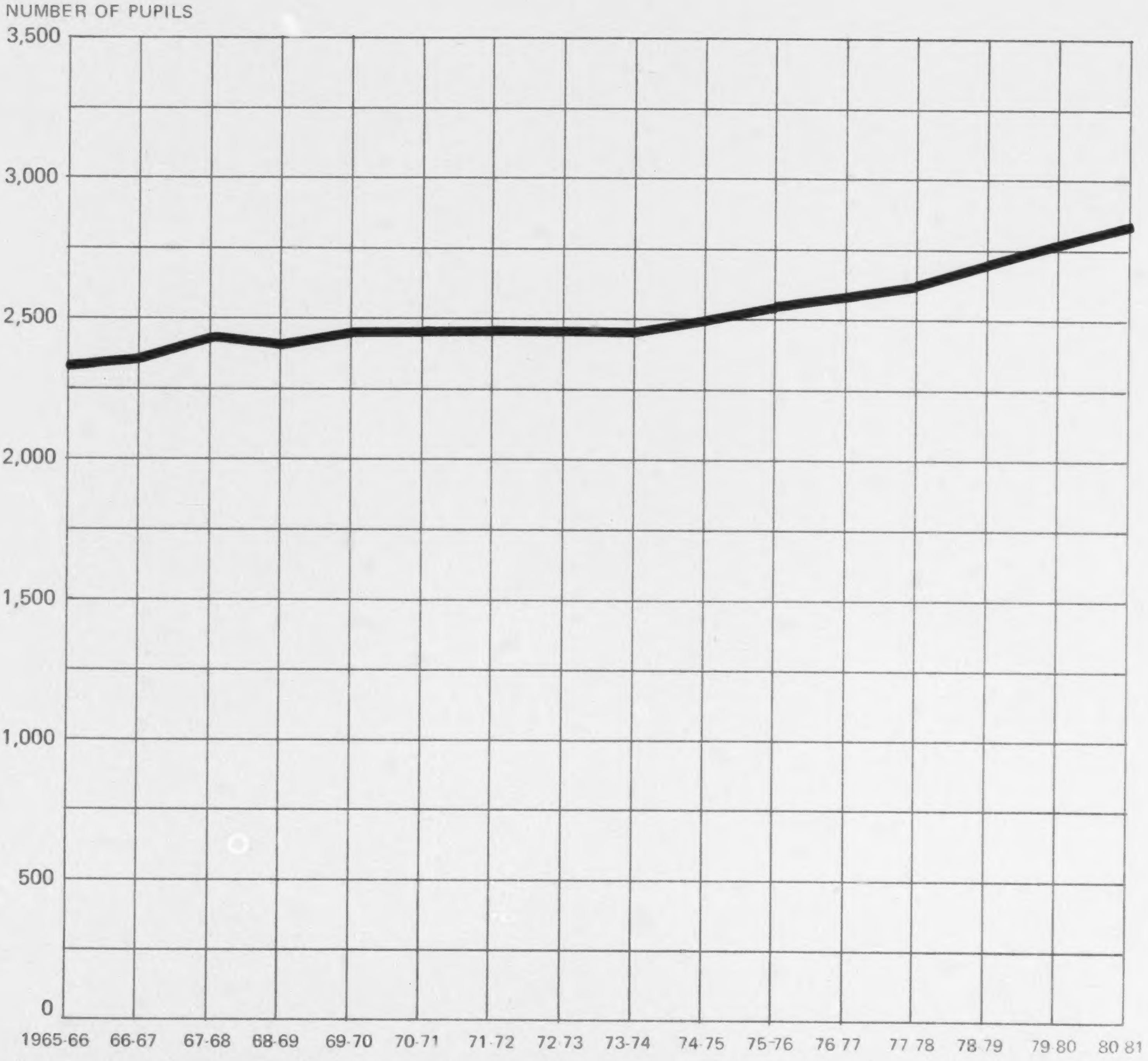
ESTIMATES OF FUTURE MEMBERSHIP, BY GRADE GROUPS
MOORESVILLE CITY SCHOOLS
1970-71 through 1980-81

Year	K	1-6	K-6	7-9	10-12	K-5	6-8	K-8	1-8	9-12	1-12	Special	Total*
1969-70	-	1,327	-	629	516	-	667	-	1,757	715	2,472	16	2,488
1970-71	178	1,295	1,473	673	513	1,251	692	1,943	1,765	716	2,481	25	2,684
1971-72	157	1,262	1,419	696	523	1,214	689	1,903	1,746	735	2,481	25	2,663
1972-73	174	1,232	1,406	698	530	1,186	674	1,860	1,686	774	2,460	25	2,659
1973-74	184	1,208	1,392	686	581	1,160	687	1,847	1,663	812	2,475	25	2,684
1974-75	194	1,201	1,395	710	610	1,185	703	1,888	1,694	827	2,521	25	2,740
1975-76	202	1,229	1,431	724	614	1,209	708	1,917	1,715	852	2,567	26	2,795
1976-77	212	1,254	1,466	730	614	1,254	687	1,941	1,729	869	2,598	26	2,836
1977-78	220	1,299	1,519	708	639	1,329	667	1,996	1,776	870	2,646	26	2,892
1978-79	230	1,378	1,608	686	651	1,393	657	2,050	1,820	895	2,715	27	2,972
1979-80	238	1,444	1,682	678	656	1,455	672	2,127	1,889	889	2,778	28	3,044
1980-81	248	1,508	1,756	695	638	1,518	724	2,242	1,994	847	2,841	28	3,117

---

* Except in 1969-70, total includes kindergarten.
Enrollments for 1969-70 are actual.

CHART 4
MEMBERSHIP IN GRADES 1–12
MOORESVILLE SCHOOLS



Estimates of Future Membership, Statesville City Schools

No significant growth in population is anticipated within the next decade within the present boundaries of the city of Statesville, which are coterminous with the school district. School membership in October, 1969, was two per cent lower than in October, 1968, and further decreases are to be expected.

Past School Membership

Table 12 shows school membership, by grades, for the past five years. Most elementary grades show evidence of outmigration. The class which is now grade six has 403 pupils; in 1965-66, when it was grade two, it had 489 pupils.

Table 12
MEMBERSHIP BY GRADES
STATESVILLE CITY SCHOOLS
1965-66 through 1969-70

Year	1	2	3	4	5	6	7	8	9	10	11	12	Sp.	Total
1965-66	512	489	461	435	421	385	401	382	366	357	319	313	127	4,968
1966-67	541	415	481	429	432	383	397	392	372	337	330	299	122	4,930
1967-68	519	445	442	449	423	420	421	396	381	341	319	311	107	4,974
1968-69	528	457	450	439	429	421	436	406	386	334	324	301	106	5,017
1969-70	484	448	437	422	429	403	434	416	381	339	317	292	94	4,896

Grade-to-Grade Movement

Table 13 shows the percentages of grade-to-grade movement derived from data in Table 12. In estimating future school membership, some percentages in the elementary grades have been increased slightly on the assumption that increased migration into surrounding areas will lead to some decline in migration out of the city. At the same time, allowance has been made for a decrease in high school dropouts.

Table 13
GRADE-TO-GRADE MOVEMENT
STATESVILLE CITY SCHOOLS

From Grade	To Grade	Per Cent Present*	Per Cent Future**
1	2	86	86
2	3	98	100
3	4	96	98
4	5	96	98
5	6	96	98
6	7	103	103
7	8	97	97
8	9	96	96
9	10	89	93
10	11	94	95
11	12	93	94

*Grades 1-7, 1967-69 average; grades 7-12, 1965-69 average.

**By 1971-72 (grades 3-6) or 1972-73 (grades 11 and 12); grade 10 reaches its peak retention in 1975-76.

Nonresident Pupils

Between 1968-69 and 1969-70, the number of nonresident pupils in the city schools declined from 224 to 184. The estimates in Tables 15 and 16 allow for further decreases at the present rate. If all nonresident pupils were suddenly withdrawn, however, total membership could be expected to decline faster than the estimates show.

Births

Births to residents of the city of Statesville from 1959 through 1968 are shown in Table 14 and Chart 1. Since the totals for 1967 and 1968 were markedly lower than those for earlier years, especially low first grade memberships are to be expected in 1973-74 and 1974-75. Even more than the current outmigration, the decline in births from 1961 onwards will contribute to the downward trend in elementary and junior high school membership. It has been assumed, however, that, following the national trend, births in Statesville will rise steadily from 1969 onward.

Table 14
LIVE BIRTHS TO RESIDENTS OF STATESVILLE
1959 through 1968

Year	Births
1959	509
1960	516
1961	537
1962	515
1963	477
1964	481
1965	489
1966	459
1967	379
1968	375

Source: Public Health Statistics Section, North Carolina State Board of Health, 1/20/70.

Kindergarten and Special Classes

Again, kindergarten enrollments have been estimated at 90 per cent of the next year's first grade. Special classes have been estimated at about two per cent of total membership.

Estimates of Future Membership

Estimates of future membership by grade and grade groups are given in Tables 15 and 16. Estimates for grades one through twelve are shown in Chart 5.

Table 15

ESTIMATES OF FUTURE MEMBERSHIP BY GRADES
STATESVILLE CITY SCHOOLS
1970-71 through 1980-81

Year	1	2	3	4	5	6	7	8	9	10	11	12	Sp.	1-12 & Sp.
1969-70	484	448	437	422	429	403	434	416	381	339	317	292	94	4,896
1970-71	486	416	444	424	409	416	415	421	399	339	319	295	104	4,887
1971-72	494	418	416	435	416	401	428	403	404	355	319	297	104	4,890
1972-73	464	425	418	408	426	408	413	415	387	364	337	300	103	4,868
1973-74	383	399	425	410	400	417	420	401	398	352	346	317	101	4,769
1974-75	379	329	399	416	402	392	430	407	385	366	334	325	99	4,663
1975-76	400	326	329	391	408	394	404	417	391	358	348	314	97	4,577
1976-77	420	344	326	322	383	400	406	392	400	364	340	327	96	4,520
1977-78	440	361	344	319	316	375	412	394	376	372	346	320	95	4,470
1978-79	460	378	361	337	313	310	386	400	378	350	353	325	94	4,445
1979-80	480	396	378	354	330	307	319	374	384	352	332	332	94	4,432
1980-81	500	413	396	370	347	323	316	309	359	357	334	312	94	4,430

Enrollments for 1969-70 are actual.

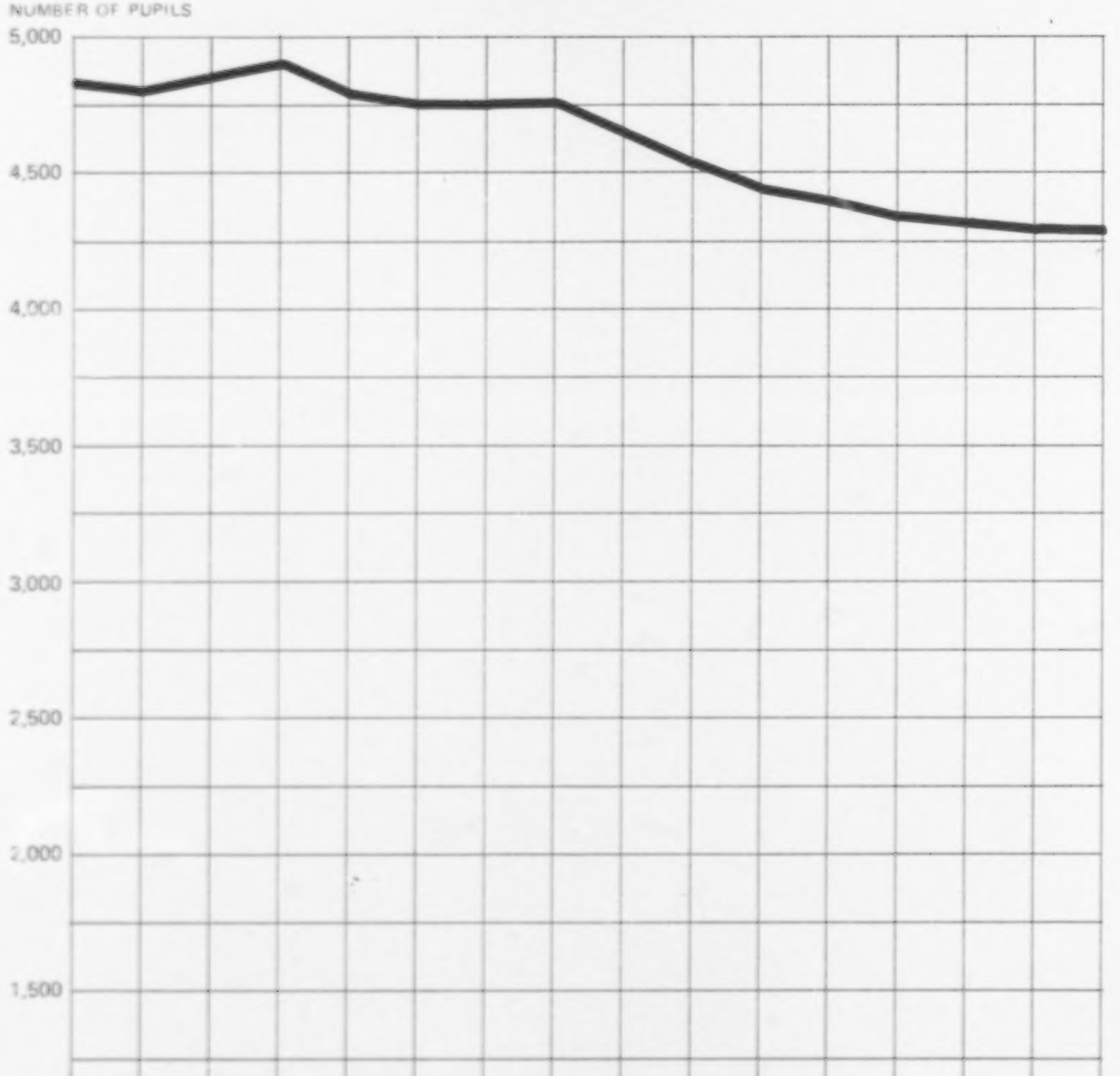
Table 16
ESTIMATES OF FUTURE MEMBERSHIP, BY GRADE GROUPS
STATESVILLE CITY SCHOOLS
1970-71 through 1980-81

Year	K	1-6	K-6	7-9	10-12	K-5	6-8	K-8	1-8	9-12	1-12	Special	Total*
1969-70	-	2,623	-	1,231	948	-	1,253	-	3,473	1,329	4,802	94	4,896
1970-71	445	2,595	3,040	1,235	953	2,624	1,252	3,876	3,431	1,352	4,783	104	5,332
1971-72	418	2,580	2,998	1,235	971	2,597	1,232	3,829	3,411	1,375	4,786	104	5,308
1972-73	345	2,549	2,894	1,215	1,001	2,486	1,236	3,722	3,377	1,388	4,765	103	5,213
1973-74	341	2,434	2,775	1,219	1,015	2,358	1,238	3,596	3,255	1,413	4,668	101	5,110
1974-75	360	2,317	2,677	1,222	1,025	2,285	1,229	3,514	3,154	1,410	4,564	99	5,023
1975-76	378	2,248	2,626	1,212	1,020	2,232	1,215	3,447	3,069	1,411	4,480	97	4,955
1976-77	396	2,195	2,591	1,198	1,031	2,191	1,198	3,389	2,993	1,431	4,424	96	4,916
1977-78	414	2,155	2,569	1,182	1,038	2,194	1,181	3,375	2,961	1,414	4,375	95	4,884
1978-79	432	2,159	2,591	1,164	1,028	2,281	1,096	3,377	2,945	1,406	4,351	94	4,877
1979-80	450	2,245	2,695	1,077	1,016	2,388	1,000	3,388	2,938	1,400	4,338	94	4,882
1980-81	468	2,349	2,817	984	1,003	2,494	948	3,442	2,974	1,362	4,336	94	4,898

---

* Except in 1969-70, total includes kindergarten.
Enrollments for 1969-70 are actual.

CHART 5
MEMBERSHIP IN GRADES 1–12
STATESVILLE SCHOOLS



Estimates of Future Membership, Consolidated County School System

Totals of current and projected membership in County and city schools are shown in Table 17. These show the total number of pupils to be expected if the three districts consolidate.

Table 17

ESTIMATES OF FUTURE MEMBERSHIP, BY GRADE GROUPS
CONSOLIDATED COUNTY SCHOOL SYSTEM
1970-71 through 1980-81

Year	K	1-6	K-6	7-9	10-12	K-5	6-8	9-12	K-8	1-8	1-12	Sp.	1-12 & Sp.	Total*
1969-70	-	9,480	-	4,464	3,296	-	4,495	4,779	-	12,461	17,240	167	17,407	17,407
1970-71	1,405	9,464	10,869	4,551	3,390	9,376	4,517	4,917	13,893	12,488	17,405	236	17,641	19,046
1971-72	1,381	9,401	10,782	4,568	3,511	9,270	4,572	5,019	13,842	12,461	17,480	237	17,717	19,098
1972-73	1,308	9,350	10,658	4,643	3,615	9,059	4,669	5,188	13,728	12,420	17,608	238	17,846	19,154
1973-74	1,331	9,183	10,514	4,752	3,739	8,889	4,816	5,300	13,705	12,374	17,674	237	17,911	19,242
1974-75	1,409	9,088	10,497	4,923	3,824	8,854	4,978	5,412	13,832	12,423	17,835	238	18,073	19,482
1975-76	1,480	9,110	10,590	5,103	3,948	8,958	5,027	5,656	13,985	12,505	18,161	241	18,402	19,882
1976-77	1,576	9,270	10,846	5,162	4,130	9,258	5,010	5,870	14,268	12,692	18,562	244	18,806	20,382
1977-78	1,692	9,633	11,325	5,159	4,330	9,704	4,994	6,116	14,698	13,006	19,122	249	19,371	21,063
1978-79	1,832	10,160	11,992	5,154	4,534	10,382	4,991	6,307	15,373	13,541	19,848	256	20,104	21,936
1979-80	1,970	10,933	12,903	5,162	4,614	11,207	5,114	6,358	16,321	14,351	20,709	266	20,975	22,945
1980-81	2,116	11,871	13,987	5,315	4,632	12,132	5,382	6,420	17,514	15,398	21,818	277	22,095	24,211

* Except in 1969-70, total includes kindergarten.
Enrollments for 1969-70 are actual.

Geographical Distribution of Public School Enrollments, Present and Projected

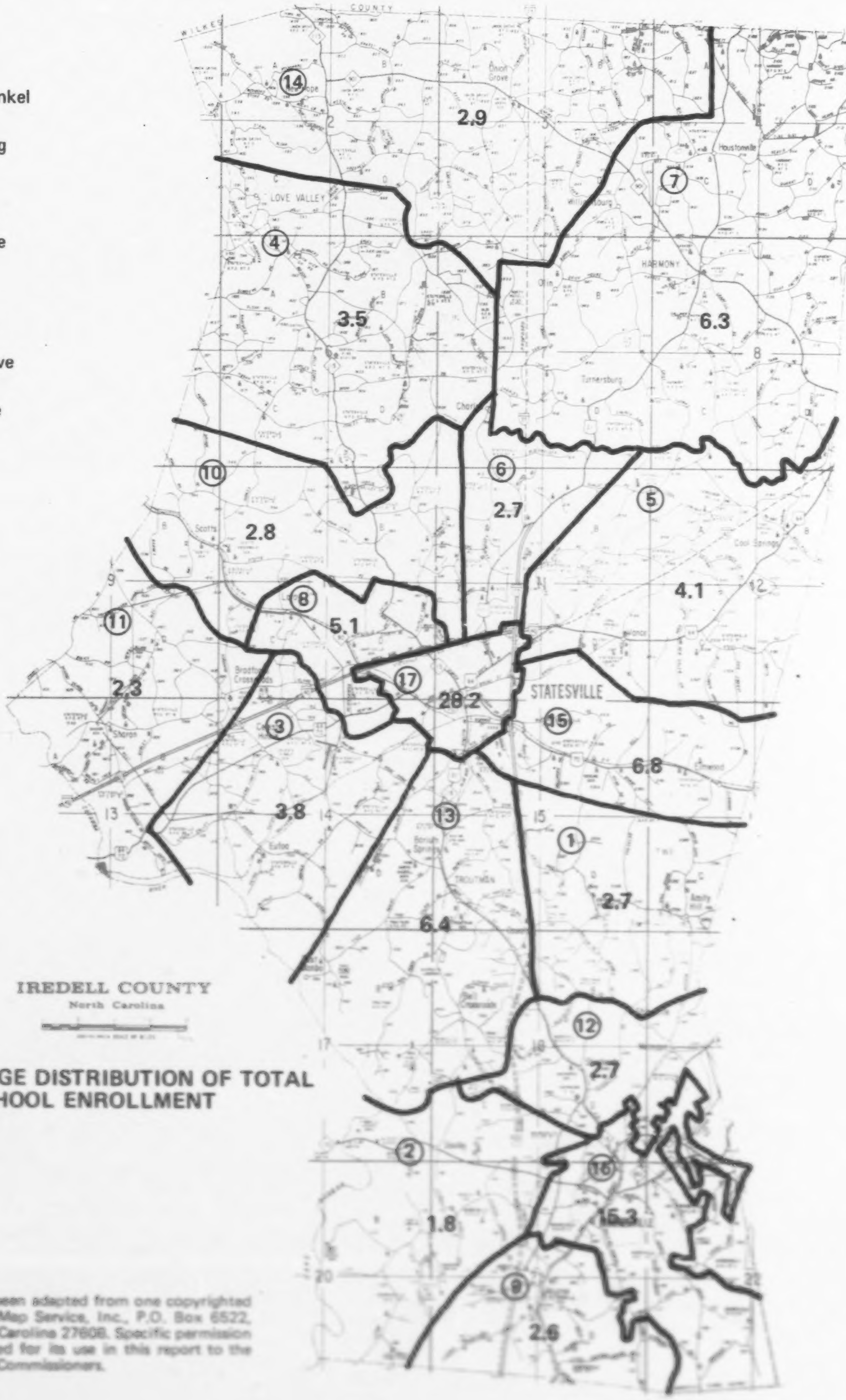
Maps 2 and 3 following, show the per cent of total enrollments by areas within the County. Map 2 represents total membership percentages of the 1969-70 school year. Map 3 depicts projected percentages by the end of the decade within the same boundary lines.

From the membership projections derived from residential growth projections, migration rates, birth rates, and attendant data, the comparative percentages shown in Table 18 and Maps 2 and 3 have been calculated.

Table 18
GEOGRAPHICAL DISTRIBUTION OF SCHOOL MEMBERSHIP IREDELL COUNTY, MOORESVILLE, AND STATESVILLE SCHOOLS

	Per Cent of Total Membership	
Location	Actual 1969-70	Projected 1980-81
Amity	2.7	3.4
Brawley	1.8	2.0
Celeste Henkel	3.9	4.2
Central	3.5	3.5
Cool Springs	4.1	5.0
Ebenezer	2.8	3.6
Harmony	6.2	6.7
Monticello	5.6	7.2
Mt. Mourne	2.7	3.2
Scotts	2.8	3.0
Sharon	2.3	2.3
Shepherd	2.9	3.8
Troutman	6.7	7.6
Union Grove	3.1	3.0
Wayside	6.9	8.8
City of Mooresville	14.3	13.1
City of Statesville	27.9	20.0

1 Amity
2 Brawley
3 Celeste Henkel
4 Central
5 Cool Spring
6 Ebenezer
7 Harmony
8 Monticello
9 Mt. Mourne
10 Scotts
11 Sharon
12 Shepherd
13 Troutman
14 Union Grove
15 Wayside
16 Mooresville
17 Statesville



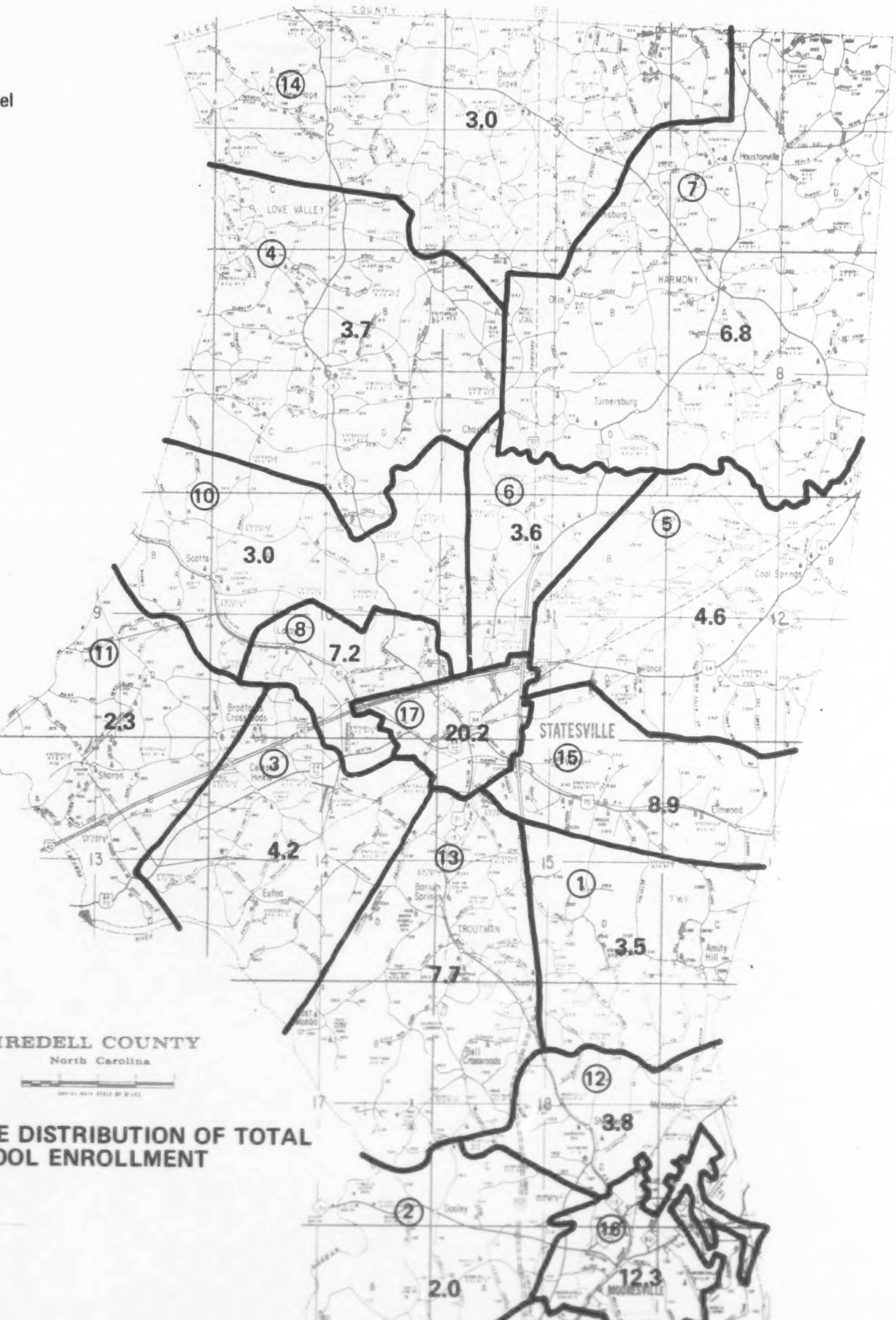
IREDELL COUNTY
North Carolina
WILKES
COUNTY
⑭
2.9
⑦
6.3
LOVE VALLEY
④
3.5
HARMONY
⑩
2.8
⑥
2.7
⑤
4.1
⑧
5.1
⑪
2.3
⑰
28.2
STATESVILLE
⑮
6.8
③
3.8
⑬
6.4
①
2.7
⑫
2.7
②
1.8
⑯
15.3
⑨
2.6

MAP 2

PERCENTAGE DISTRIBUTION OF TOTAL PUBLIC SCHOOL ENROLLMENT 1969-70

This map has been adapted from one copyrighted by Champion Map Service, Inc., P.O. Box 6522, Raleigh, North Carolina 27608. Specific permission has been granted for its use in this report to the Iredell County Commissioners.

1 Amity
2 Brawley
3 Celeste Henkel
4 Central
5 Cool Spring
6 Ebenezer
7 Harmony
8 Monticello
9 Mt. Mourne
10 Scotts
11 Sharon
12 Shepherd
13 Troutman
14 Union Grove
15 Wayside
16 Mooresville
17 Statesville


WILKES
COUNTY
⑭
3.0
⑦
Houstonville
LOVE VALLEY
④
HARMONY
3.7
6.8
Turnersburg
⑩
⑥
3.6
⑤
Scotts
3.0
Cool Springs
⑧
7.2
4.6
⑪
Vance
2.3
⑰
20.2
STATESVILLE
⑮
Sharon
③
8.9
Elmwood
4.2
⑬
①
Eufola
Barium Springs
TROUTMAN
3.5
Amity Hill
7.7
IREDELL COUNTY
North Carolina
⑫
3.8
②
⑯
12.3
MOORESVILLE
2.0
⑨
3.2

MAP 3

PERCENTAGE DISTRIBUTION OF TOTAL PUBLIC SCHOOL ENROLLMENT 1980-81

This map has been adapted from one copyrighted by Champion Map Service, Inc., P.O. Box 6522, Raleigh, North Carolina 27608. Specific permission has been granted for its use in this report to the Iredell County Commissioners.

From the preceding analysis, it will be noted that the percentage of total membership for the cities of Statesville and Mooresville combined will decline from 42.2 per cent at present to a projected 33.2 per cent by 1980.

The areas contiguous to Statesville will have 36.4 per cent of total membership by 1980 as compared to Statesville's projected 20.0 per cent.

The areas immediately adjacent to Mooresville will have 9 per cent of the total compared to Mooresville's projected 13.1 per cent by 1980.

In summary, by the end of the decade the cities of Statesville and Mooresville will account for only 33.2 per cent of total membership, and the County will have increased to 66.8 per cent of total enrollment.

The implications of these projections in connection with consolidation are obvious. It is apparent that new building construction, the abandonment and/or renovation of existing facilities, and the selection of appropriate sites to accommodate economically the projected increased student membership should be approached on a community-wide basis. Complete coordination in the area of facility planning should result in nonduplication of facilities, least possible costs, and maximum flexibility in educational programs for children.

It is also evident that students attending South Iredell High School will have different backgrounds from those in North Iredell High School. In keeping with a more suburban atmosphere, the curriculum (especially in occupational education) should no longer be the same for South High School as it is for North High School.

II

EXISTING FACILITIES - ELEMENTARY SCHOOLS

Understandably, a district cannot ignore the nature of existing facilities. Existing buildings must be fully utilized, and consideration should be given to their enrollment capacities and their general character.

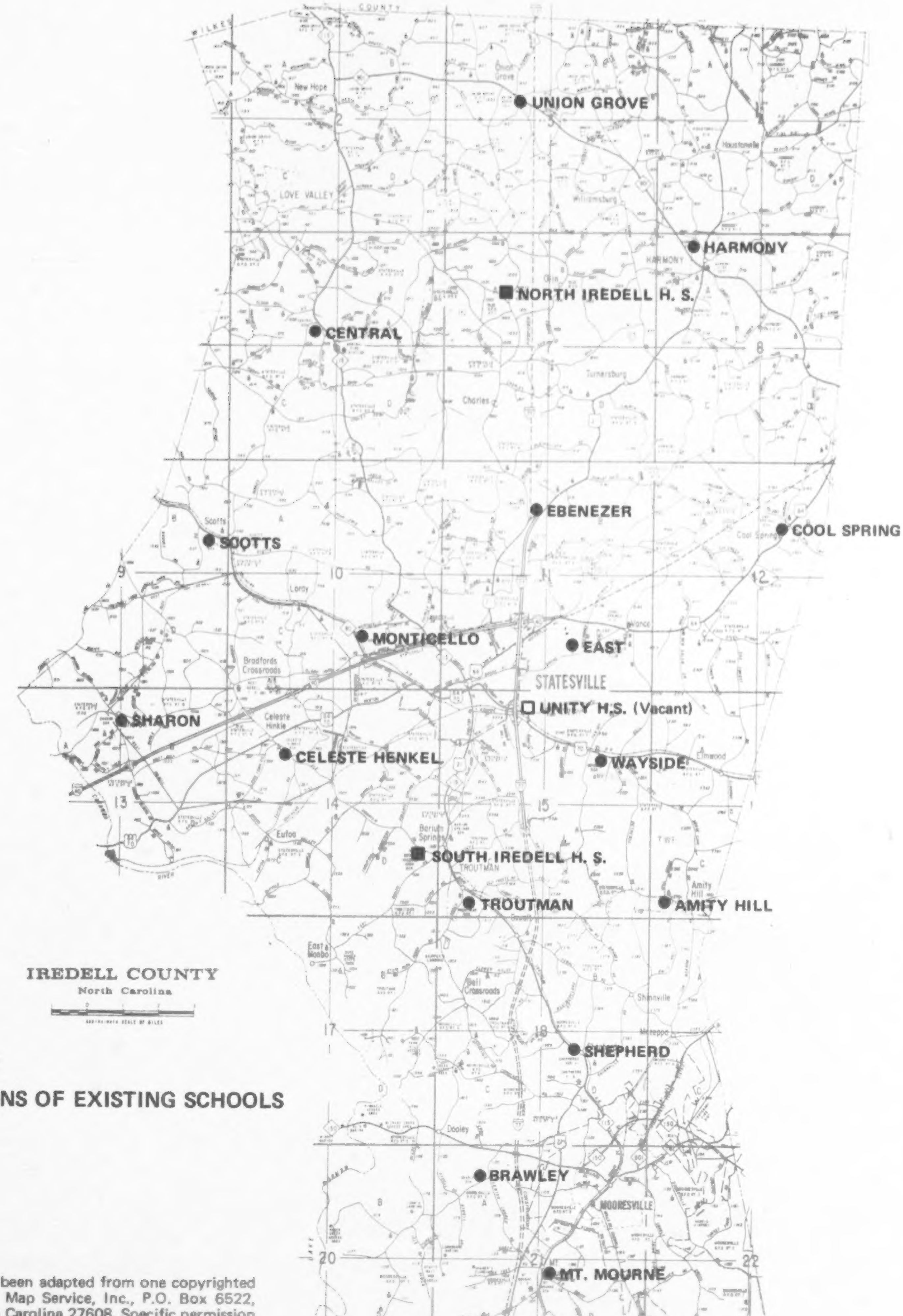
It is quite obvious, in the light of trends in technology and our present and projected job needs, that education is the ladder for upward economic movement. It is, therefore, essential that the quality of education be uniformly high at all schools and school levels of the area. In the following pages, each of the buildings will be analyzed in terms of its potential for aiding or hindering emerging curriculum practices.

Although some of the analysis may appear to emphasize building deficiencies, the purpose of the analysis is to point out things which need to be improved to keep the educational program moving forward. No particular attempt has been made to point out good features of a building; it is assumed that the reader will interpret this document accordingly.

Iredell County

Table 19 lists the elementary schools in the County and gives the grades housed, their capacities and enrollments. The Unity School is to be closed in 1970 and is therefore not included in capacity figures. Capacity has been calculated at 28 and 25 per classroom.

Map 4 shows the locations of the schools.


UNION GROVE
HARMONY
NORTH IREDELL H. S.
CENTRAL
EBENEZER
COOL SPRING
SCOTTS
MONTICELLO
EAST
STATESVILLE
UNITY H.S. (Vacant)
SHARON
CELESTE HENKEL
WAYSIDE
SOUTH IREDELL H. S.
TROUTMAN
AMITY HILL
SHEPHERD
BRAWLEY
MOORESVILLE
MT. MOURNE
IREDELL COUNTY
North Carolina

MAP 4
LOCATIONS OF EXISTING SCHOOLS

This map has been adapted from one copyrighted by Champion Map Service, Inc., P.O. Box 6522, Raleigh, North Carolina 27608. Specific permission has been granted for its use in this report to the Iredell County Commissioners.

Table 19
CAPACITIES AND ENROLLMENT
IREDELL COUNTY SCHOOLS
1969-70

School	Grades	No. of Classrooms	Capacity		Enrollment
			@28	@25	
Amity Hill	1-6	15	420	375	271
Brawley	1-6	8	224	200	167
Celeste Henkel	1-8	21	588	525	606
Central	1-8	19	532	475	441
Cool Spring	1-8	13	364	325	526
Ebenezer	1-6	10	280	250	263
Harmony	1-8	27	756	675	773
Monticello	1-8	22	616	550	701
Mr. Mourne	1-6	11	308	275	270
Scotts	1-8	14	392	350	352
Sharon	1-6	7	196	175	218
Shepherd	1-6	11	308	275	303
Troutman	1-6	29	812	725	597
Troutman	7&8	17	476	425	612
Union Grove	1-8	23	644	575	383
Wayside	1-6	11	308	275	436
New East	1-8	30	840	750	-
Unity		-	-	-	324
Totals		288	8,064	7,200	7,243

Amity Hill

Acreage of site: 5
Year constructed: 1935
Year(s) of addition(s): 1954, 1957, 1960, 1962, 1964, 1965
Grades housed: 1-6
No. of classrooms: 15
Pupil capacity: 420 and 375*
Enrollment: 271

The Amity Hill site is too small. Desirably, it should be 14 acres to allow space for parking, outdoor activities, and possible future expansion of the building. When and if possible, another 9 acres should be obtained. A paved parking area is needed.

Amity is a non-fire-resistive structure. Floors are of wood. Panic bars should be installed on all doors.

The building was freshly painted last summer, inside and out. It has a clean and neat appearance. The wooden floors need sanding and refinishing. Consideration might be given to carpeting the classrooms.

There is room to grow within the building, since capacity exceeds enrollment. Three classrooms are not being used at present. One of these classrooms is utilized as a teachers' lounge. Another should be reserved for special instruction. This reduces the capacity of the building. (13 by 28 = 364)

---

* One room is used for special education (EMR). Class size limitation reduces capacity of building. One classroom is used for a teachers' lounge and one is to be used for special instruction. Capacity is reduced to 348.

The classrooms in the original building are small, about 650 square feet. Class size might better be 25 in these small rooms. Some time in the future these rooms can be combined for kindergarten spaces.

The classrooms in the additions are larger, running at 800 to 900 square feet. These are used as primary classrooms. The two larger ones, at 940 square feet, may be used for kindergartens, when needed.

Some rooms have fluorescent, some incandescent lighting. The latter should be replaced by fluorescent.

In addition to the classrooms there are:

Cafeteria

Kitchen

Gymtorium

Office

Library

The cafeteria seats 100. It is a bright cheerful room. The kitchen is too small. Storage space is also short. This facility should be enlarged.

The gymtorium is a satisfactory space. The office is also satisfactory.

The library is small, with a seating capacity of 30. It has a tile floor. Carpeting is desirable. There is a good-sized workroom. The fluorescent lighting is satisfactory. There are 3,705 volumes on the shelves.

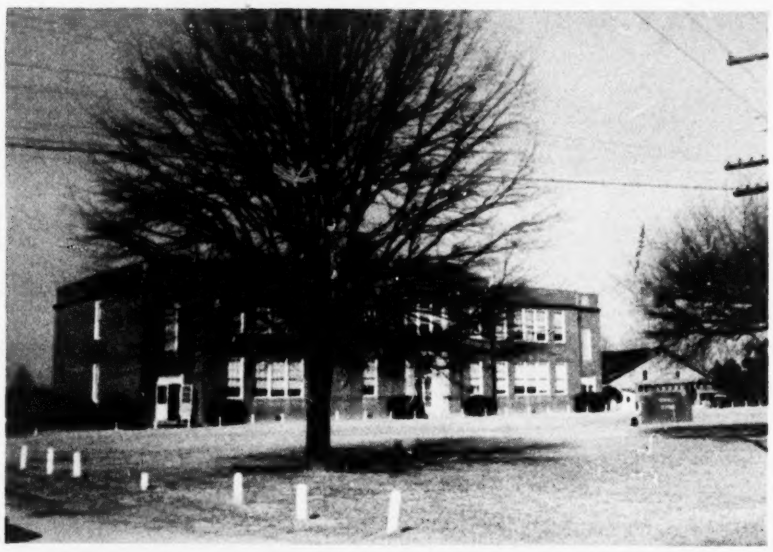
A small room in the building, not now utilized, has a capacity of 10. It can well be used for small group instruction.

Amity can continue to be used as an elementary facility, for grades one through five or one through six. The immediate needs at Amity are:

1. An expanded site
2. An enlarged kitchen
3. Installation of fluorescent lighting throughout the school
4. The sanding and refinishing of the wooden floors, or better yet, carpeting of the classrooms
5. The carpeting of the library

Brawley

Acreage of site: 10
Year constructed: 1936
Year(s) of additions(s): -
Grades housed: 1-6
No. of classrooms: 8
Pupil Capacity: 224 and 200
Enrollment: 167



The site of Brawley School is satisfactory. There is adequate space for parking and for outdoor physical activities. There is also an area for expansion of the school plant, if and when needed.

Brawley is 34 years old and shows its age. The wooden stairs to the second story need repair or replacement. So do the outside doors and some of the window casements. The building is now being given a sorely needed fresh coat of paint on the inside. Some window shades need replacement.

A new roof was recently put on, the consultants were informed.

Brawley is a non-fire-resistive structure. It is a brick structure with a wood frame. Floors are of wood. Consideration should be given to installing a fire detection system within the building. Panic bars should be installed on all outside doors.

Six of the eight standard classrooms are 610 square feet. This is too small. They should be nearly 900 square feet. Because of their small size the class size should be kept to 25 maximum.

There are two larger rooms of 880 square feet. They can serve as kindergarten rooms or primary rooms.

Because there are no special instruction rooms or small rooms for small group instruction, such as remedial reading, a standard classroom should be reserved for this purpose. This, of course, reduces capacity of the building. (7 by 28 = 196)

In addition to the eight standard classrooms there are the following facilities:

Cafeteria

Kitchen

Auditorium

Office and faculty room

Gymnasium (separate from building)

Library

Audiovisual room (old balcony)

The library is small, about the size of a classroom - 730 square feet. It has a seating capacity of 20. Desirably, the room should be twice the size. There are 1,683 volumes on the shelves. There is a small workroom adjacent to the library. The incandescent lighting should be replaced by fluorescent.

The cafeteria will seat about 75 at any one time. The kitchen is small.

The office is small and so placed that the teaching principal has direct access to his classroom. For this size school it is satisfactory.

Apart from the school building is a gymnasium. It is of good size, especially for the elementary grades. It is not a typical school structure, and is rather barn-like in appearance. It is in need of maintenance.

The audiovisual room has been converted from the former balcony of the auditorium. It is a dismal room in need of brightening. More satisfactory lighting should be installed.

The auditorium is a large facility for the size of the school. Consideration should be given to making better use of this space. One possibility is to develop it into an open-planned teaching area, which might accommodate three conventional-sized classes.

Like many of the school buildings in the County, Brawley has not been maintained as well as it should have been. However, it is not beyond saving. Its age - 34 years - is not such that it should be abandoned.

There should be a planned program of renovation to include the following:

1. Installation of fluorescent lighting
2. Completion of painting
3. Replacement of outside doors
4. Installation of panic bars on outside doors and a fire detection system
5. Replacement or repair of stairs and window frames
6. Refinishing of floors (or carpeting)
7. Installation of carpet in the library
8. Installation of work sinks in the classrooms

Consideration should be given to using Brawley to house grades one through five or kindergarten through five (or even one through four, or kindergarten through four) eventually.

Celeste Henkel

Acreage of site: 10
Year constructed: 1926
Year(s) of addition(s): 1936, 1945, 1948, 1964
Grades housed: 1-8
No. of classrooms: 21*
Pupil capacity: 588 and 525
Enrollment: 606

Consideration should be given to retiring Celeste Henkel by 1976, or sooner, if possible. There are a number of reasons for this consideration:

By 1976 the original structure will be 50 years old. The structure shows its age; it is worn. More recent parts of the building are of inferior construction. The building is in serious need of extensive maintenance. Several rooms need new ceilings. Painting is needed throughout the building. The incandescent lighting should be replaced by fluorescent, where it has not already been replaced. The building is of non-fire-resistive construction.

The library is small, seating for no more than 30. There is no workroom for the librarian. This space needs expansion and improvement.

The decision may be made to raze only the original section of the building, to do some new building and renovate the additions. Renovation will be extensive.

---

* Plus one room (700 sq. ft.) used for special education; adjacent to old shop.

There are two classrooms of 940 square feet which might be used for kindergartens. There is also the former homemaking room, of almost 1,000 square feet, which might serve as a kindergarten.

The other classrooms are all 600 to 700 square feet in size, too small for modern-day educational programs. Consideration should be given to combining some of these rooms to make larger rooms.

Four of the classrooms are around the gymnasium. This is, of course, a poor situation because of the noise created by physical education activities. These rooms should be abandoned for regular classroom use.

The science room is very small. It has 620 square feet of space.

There is a frame building which houses the music program. This space should not be considered in any long-range plan of facilities.

Central

Acreage of site: 20
Year constructed: 1929
Year(s) of addition(s): 1936, 1951, 1953
Grades housed: 1-8
No. of classrooms: 19
Pupil capacity: 532 and 475
Enrollment: 441

Central is on a good-sized site. Parking space is adequate, as is outdoor space for physical activities.

The classrooms are small in size; some as small as 500 square feet, others at 630 square feet. These rooms should be combined in order to meet space needs for a good elementary program. The combining of rooms will, of course, reduce the capacity of the building.

The incandescent lighting is unsatisfactory and should be replaced by fluorescent lights.

In addition to the classrooms there are the following facilities:

Auditorium and stage

Gymnasium - (one station) - this is an excellent facility

Lunchroom and kitchen

Science room

2 Home economics rooms - these should be utilized; they are not at the present time

Library - this is a small space, capacity about 30; there are 4,500 volumes on the sheives. There is no workroom for the librarian. The library needs to be expanded, especially if the school continues to house grades seven and eight.

This is a non-fire-resistive structure. Panic bars need to be installed on all doors.

Painting is needed in some areas on the inside. The outside trim is also in need of paint.

Cool Spring

Acreage of site: 18
Year constructed: 1921 (to be abandoned)
Year(s) of addition(s): 1936, 1944, 1954
Grades housed: 1-8
No. of classrooms: 13
Pupil capacity: 364 and 325 (not including 1921 section)
Enrollment: 526*

Cool Spring is on a good-sized site. Parking space is adequate as is outdoor space for physical activities.

This is a non-fire-resistive building. Maintenance has been satisfactory.

Some of the classrooms are too small at 600 square feet. But there are several larger rooms which could be used for kindergarten.

The incandescent lighting is unsatisfactory and should be replaced by fluorescent.

In addition to the classrooms there are the following facilities:

An excellent one-station gymtorium; the floor needs refinishing.

There are two libraries in the building complex. They are both too small, especially the primary facility. There are 4,374 volumes on the shelves. Plans are being made to utilize the former home economics building for a library. This should prove far more satisfactory. Care should be taken to install satisfactory fluorescent lighting in the library.

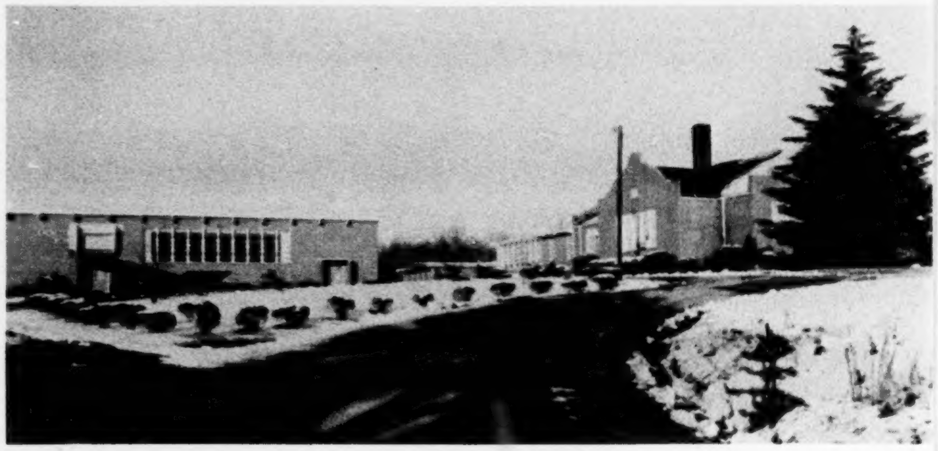
---

* The old 1921 building is now being used. It is to be closed, reducing capacity by some 250 to 280.

Plans are also being made to convert the former agricultural shop to a cafeteria. It will be satisfactory for a school the size of Cool Spring.

Ebenezer

Acreage of site: 14
Year constructed: 1926
Year(s) of addition(s): 1953, 1957, 1969
Grades housed: 1-6
No. of classrooms: 10
Pupil capacity: 280 and 250
Enrollment: 263



The site of Ebenezer is satisfactory.

The original 1926 building is in need of renovation. The wooden windows need replacement.

When visited by the consultant, the building needed cleaning.

Some of the rooms are small, at 630 square feet. These rooms should be expanded or class size limited in them.

The all-purpose room serves as a gymnasium and auditorium. It is satisfactory.

The small office also serves as a teachers' lounge. This is not a good arrangement.

There is a small cafeteria and kitchen.

There is a library which was built in 1969. It is quite satisfactory for a school of this size. It has a pupil capacity of 40. There are 3,000 volumes on the shelves. The room is carpeted to improve acoustics as well as appearance.

Harmony

Acreage of site: 24
Year constructed: 1913*
Year(s) of addition(s): 1929, 1952,
1959, 1969
Grades housed: 1-8
No. of classrooms: 27
Pupil capacity: 756 and 675
Enrollment: 773

Acreage of the site is satisfactory for both parking and physical activities and for the construction of further additions.

There are 27 classrooms in the school. Of these, 12 are in a brand new structure. These 12 are designed for use by pupils in grades one through six. This is a fire-resistive structure. The fluorescent lighting is excellent. The whole building is carpeted, and is bright and cheerful.

In the older buildings, the primary classrooms are of satisfactory size. The classrooms for the intermediate grades are small, about 700 square feet.

In addition to the classrooms there are the following facilities:

Administrative suite

Large and excellent gymnasium

Cafeteria and kitchen, both satisfactory

Small auditorium and stage

---

* Abandoned and being razed.

The library - this is an excellent facility, having a capacity of 50 pupils. There are 7,200 volumes on the shelves. There is a separate workroom for the librarian. Needed are some carrels for individual study.

The principal noted the lack of a separate music room. Such a space is desirable, as is a separate art room for the intermediate grades.

Monticello

Acreage of site: 13
Year constructed: 1927
Year(s) of addition(s): 1950, 1959, 1964, 1966, 1967, 1968
Grades housed: 1-8
No. of classrooms: 22
Pupil capacity: 616 and 550
Enrollment: 701

The site of Monticello is somewhat small for the size of the school. Sixteen acres would be more satisfactory.

Consideration should be given to phasing out the original eight-classroom building, vintage 1927.

Painting is needed in some areas of the old building.

Twelve of the classrooms are 600 plus square feet in size. These spaces are too small for a modern educational program. Rooms should be combined into larger spaces of 800 to 900 square feet.

The primary classrooms are 900 square feet and satisfactory; some could be used for kindergartens.

The incandescent lighting in the building should be replaced by fluorescent. Some rooms already have fluorescent lighting.

In addition to the classrooms there are the following spaces:

Office

Gymtorium and stage

Cafeteria

Kitchen

Library

The library is simply a converted classroom space with a capacity of 30 pupils. There are 5,300 volumes on the shelves. The fluorescent lighting is satisfactory. A larger library is needed.

At present, five new classrooms are planned for the building to meet growing enrollments.

Mt. Mourne

Acreage of site: 10
Year constructed: 1949
Year(s) of addition(s): 1956, 1957, 1965
Grades housed: 1-6
No. of classrooms: 11
Pupil capacity: 308 and 275
Enrollment: 270

The Mt. Mourne site is satisfactory for the small school. If the building is enlarged, then the site should be also.

The school was originally constructed in 1949. There have been three additions since then.

Maintenance has been generally satisfactory. The water fountains needed maintenance when seen by the consultant. Consideration should be given to replacing them.

Six of the classrooms are small, about 630 square feet, too small for the purposes of elementary education today. The other rooms are about 900 square feet and satisfactory in size for elementary programs.

The lighting is incandescent, it should be changed to fluorescent.

In addition to the classrooms there are the following facilities:

Small gymtorium with stage - the floor needs refinishing in this space

Lunchroom and kitchen

Office

Library -- the library is in the most recent addition. It has a capacity of 30 pupils with about 2,900 volumes on the shelves.

Scotts

Acreage of site: 12.5
Year constructed: 1946*
Year(s) of addition(s): 1959, 1969
Grades housed: 1-8
No. of classrooms: 14
Pupil capacity: 392 and 350
Enrollment: 352

The site of Scotts is satisfactory

The original Scotts building, built in 1922, is now abandoned and is to be razed.

Immediately in front of it is a new (1969) primary school of fire-resistive construction. This is an excellent facility with fluorescent lighting and carpeting.

Cleaning needs to be improved in the old building, the former high school. There is also a need for renovation of this structure.

The gymtorium is a separate facility. It needs renovation, and certainly, a new floor.

There are also a lunchroom and kitchen.

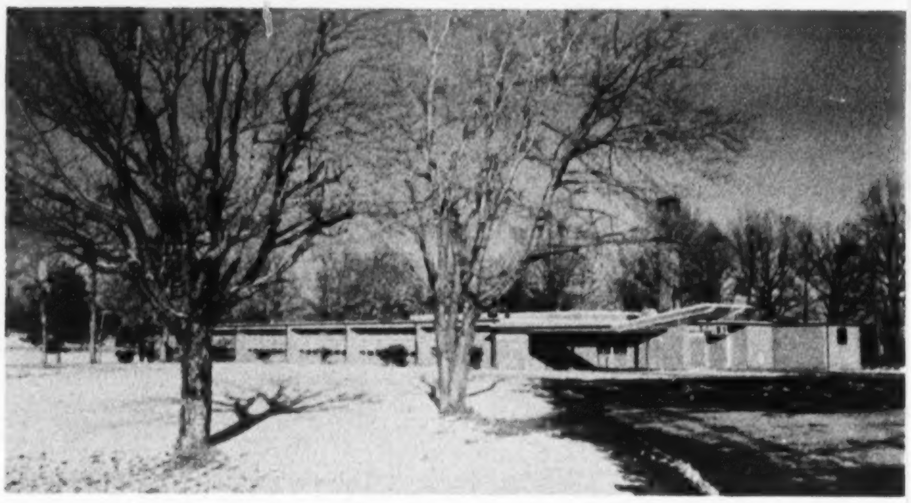
The library is an excellent facility with good capacity and with about 3,500 volumes on the shelves. There are a separate conference and workroom also.

---

* The original 1922 building is being razed.

Sharon

Acreage of site: 11
Year constructed: 1955
Year(s) of addition(s): 1956, 1964
Grades housed: 1-6
No. of classrooms: 7
Pupil capacity: 196 and 175
Enrollment: 218



Sharon's site is satisfactory.

This is a relatively new building of brick and fire-resistive construction.

Maintenance has been generally satisfactory. Some painting is needed.

The classrooms are of good size. Two would serve as kindergartens.

The library is now being used as a classroom because of enrollment demands. As soon as possible it should be returned to its intended purpose.

In addition to the classrooms there are the following facilities:

Cafetorium - this space is also temporarily serving as a library

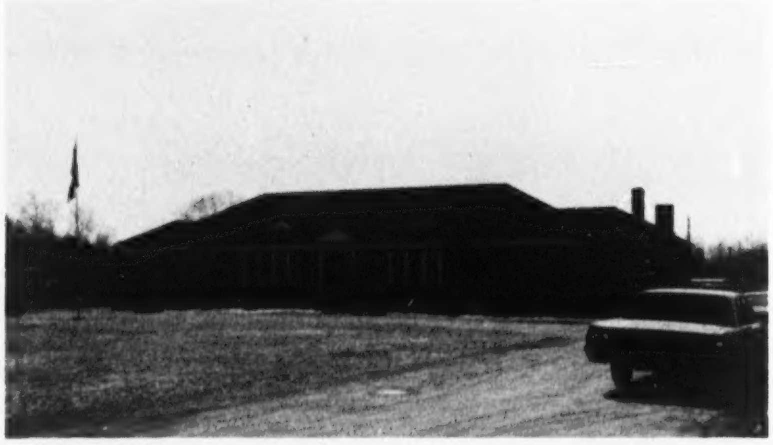
Kitchen

Office

The principal expressed a need for a gymnasium. Such an expensive facility would be hard to justify in this small school. The all-purpose room can, of course, be used for inside physical activities as well as for lunch. This will necessitate moving the library from this space. If and when the building is expanded, a gymnasium should be considered.

Shepherd

Acreage of site: 7.5
Year constructed: 1929
Year(s) of addition(s): 1953, 1969
Grades housed: 1-6
No. of classrooms: 11
Pupil capacity: 308 and 275
Enrollment: 303



Shepherd is one of the three small elementary schools located in the south of Iredell County, the other two being Brawley and Mt. Mourne.

The site is small in terms of a desirable minimum of 10 acres. But as far as parking and play areas are concerned, it is satisfactory.

The original building is showing its age. It needs painting outside and also in places inside.

The classrooms are small, about 600 square feet in size, in the original structure. There are four new primary rooms (1969). These are excellent spaces.

Where there is incandescent lighting in the building, it should be replaced by fluorescent.

In addition to the classrooms there are the following facilities:

Auditorium

Small lunchroom

Small office

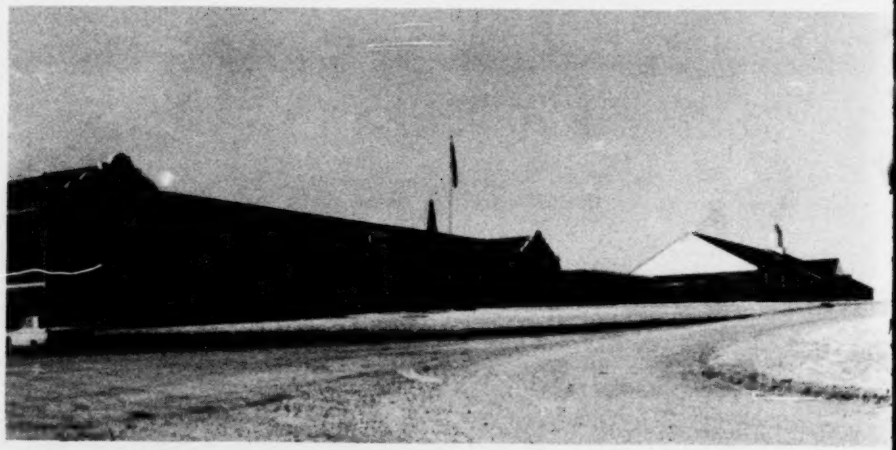
There is no library. There are some books in the lunchroom; this is an unsatisfactory arrangement.

Needed at this school are a library and a space for indoor physical activities.

Consideration might be given to better utilization of the auditorium, say for open-planned space and for team teaching. This would require removal of the seats and renovation.

Troutman Elementary

Acreage of site: 39*
Year constructed: 1926
Year(s) of addition(s): 1950, 1954
Grades housed: 1-6
No. of classrooms: 29
Pupil capacity: 812 and 725
Enrollment: 597



Troutman consists of two buildings. The primary and elementary building and the junior high building are on the same site.

Painting is needed on the inside of the building.

Most of the classrooms are too small in area - 600 plus square feet. A number of these rooms should be combined into 900-square foot spaces. There are three primary rooms which are larger, 900 square feet, and could serve as kindergartens.

The incandescent lighting should be changed to fluorescent.

In addition to the classrooms there is a one-station gymnasium. This facility is used by all grades on the campus. This space is also used as an auditorium. A lunchroom and kitchen are also used in common by both buildings on the campus.

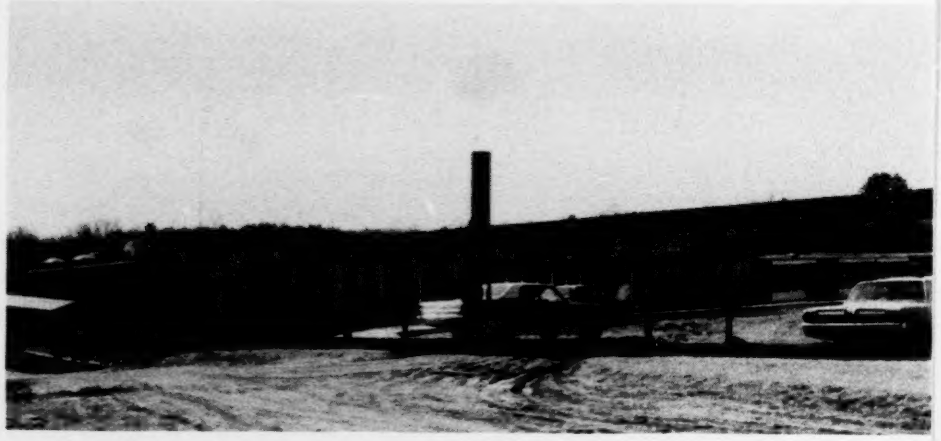
The library is a satisfactory facility. It seats some 40 pupils. There are 6,331 volumes on the shelves.

---

* Entire site, for elementary and junior high buildings.

Troutman Junior High

Acreage of site: 39*
Year constructed: 1956
Year(s) of addition(s): 1960, 1963
Grades housed: 7 and 8
Number of classrooms: 17
Pupil capacity: 476 and 425
Enrollment: 612



Troutman Junior High was built as a high school, so it has some special facilities which can well be used by the junior high school pupils: three science rooms and two home economics rooms. It lacks a gymnasium although it does have an all-purpose room. It also lacks special spaces for music, art, and shop.

There is a library, which is of good size, seating some 50 pupils. There are also a workroom-office for the librarian and one conference room. There are about 4,500 volumes on the shelves.

The classrooms are good sized, most of them being over 800 square feet.

Desirably, the two Troutman buildings should be administered as separate schools - one the elementary and one the junior high school. To do this it will be necessary and desirable to develop separate cafeterias and gymnasiums for the buildings. The elementary building might continue to use the existing cafeteria, and the multi-purpose room in the junior high can be converted to a cafeteria or cafetorium for that building. A gymnasium should also be built for the junior high students. It will also be necessary to build more classrooms and special spaces for art, music, and shop.

---

* Site shared with elementary facility.

Union Grove

Acreage of site: 12
Year constructed: 1929
Year(s) of additions: 1936, 1950, 1954
Grades housed: 1-8
No. of classrooms: 23
Pupil capacity: 644 and 575
Enrollment: 383

Some schools such as Union Grove have a County-owned house for the principal.

The Union Grove site is satisfactory, especially in view of the decreased enrollment at the school.

Some maintenance is needed on the building. Painting is needed inside and outside.

The incandescent lighting should be replaced with fluorescent.

Many of the classrooms are small, 600 square feet approximately. These rooms should be combined into larger spaces. This will reduce the capacity of the building to near 425.

There are two libraries in the school: a very small primary library and a library for the intermediate grades. There are some 4,000 volumes on the shelves.

In addition, there are an office, cafeteria, and gymnasium. The gymnasium is an excellent facility.

Wayside

Acreage of site: 14-1/4
Year constructed: 1947
Year(s) of addition(s): 1957, 1964
Grades housed: 1-6
No. of classrooms: 11
Pupil capacity: 308 and 275
Enrollment: 436

The Wayside School is on a satisfactory site.

The original building is of non-fire-resistive construction. Panic bars need to be installed on all doors. The doors of the main front entrance open in; this is hazardous.

Six of the classrooms are small and should be combined to make larger spaces.

Where there is incandescent lighting it should be replaced with fluorescent.

In addition to the classrooms there are the following facilities:

Office

Cafeteria - now also used as a library; this is an unsatisfactory arrangement.

Library now used as a classroom. This space should assume its intended function.

All-purpose room with stage

There are on the site two mobile classrooms. Next school year, when the East Elementary School opens, the enrollment pressures should ease on the school, permitting the library to be used again and the removal of the temporary classrooms.

East School

Acreage of site: 30
Year constructed: 1969-70
Grades to be housed: Designed for K-6
Pupil capacity: 800 (approximately)

The East Elementary School is scheduled to open in 1970. It was designed as a kindergarten-through-grade-six school but will initially house grades one through eight.

It is an open-plan school. There is a large resource center and multi-purpose area for dining, for physical training, and for assembly.

The new school will absorb the enrollment of Unity School which is closing and some pupils from Cool Spring, Wayside, and Harmony.

Summary - Iredell County Elementary Schools

In general, there are a number of things which can be stated about the Iredell County schools:

Fluorescent lighting should be installed to replace unsatisfactory incandescent lighting. This has already been done in some buildings; it needs to be done as soon as possible in all the buildings.

Maintenance needs to be improved in some of the buildings. The consultants have been given to understand that dollars for maintenance have been lacking over the years. It is, of course, wiser to spend so much a year to avoid large expenditures in the future.

Standards of cleanliness need to be raised. Floors were dirty in some schools. Water fountains were often in need of cleaning.

Consideration needs to be given to providing improved health facilities. Health rooms are conspicuous by their absence or inadequacy.

Work sinks need to be installed in many classrooms.

Classrooms in the older buildings are frequently too small for elementary school instruction - at 600 plus square feet. These rooms should be enlarged by combining spaces to 800 to 900 square feet, and 1,200 square feet for kindergartens.

Programs and facilities for grades seven and eight need to be upgraded. There should be home economics and industrial arts programs with special spaces for these programs. These spaces can be developed at the schools for kindergarten through grade eight or in separate buildings for grades seven and eight, or seven through nine, or six through eight.

Special spaces for music and art are needed. Gymnasiums are needed at some schools.

Where they are not paved, parking spaces at the schools should be paved.

The school authorities in Iredell are to be commended for their provision of libraries in the elementary schools. Almost all of the schools have libraries, or at least spaces utilized as such. The library collections are growing toward the desirable minimum set by the American Library Association:*

The standard recommended for schools of 250 students or over are as follows:

> Books - At least 6,000-10,000 titles representing 10,000 volumes or 20 volumes per student, whichever is greater.

---

* American Library Association, Standards for School Media Programs, 1969, p. 30.

Mooresville

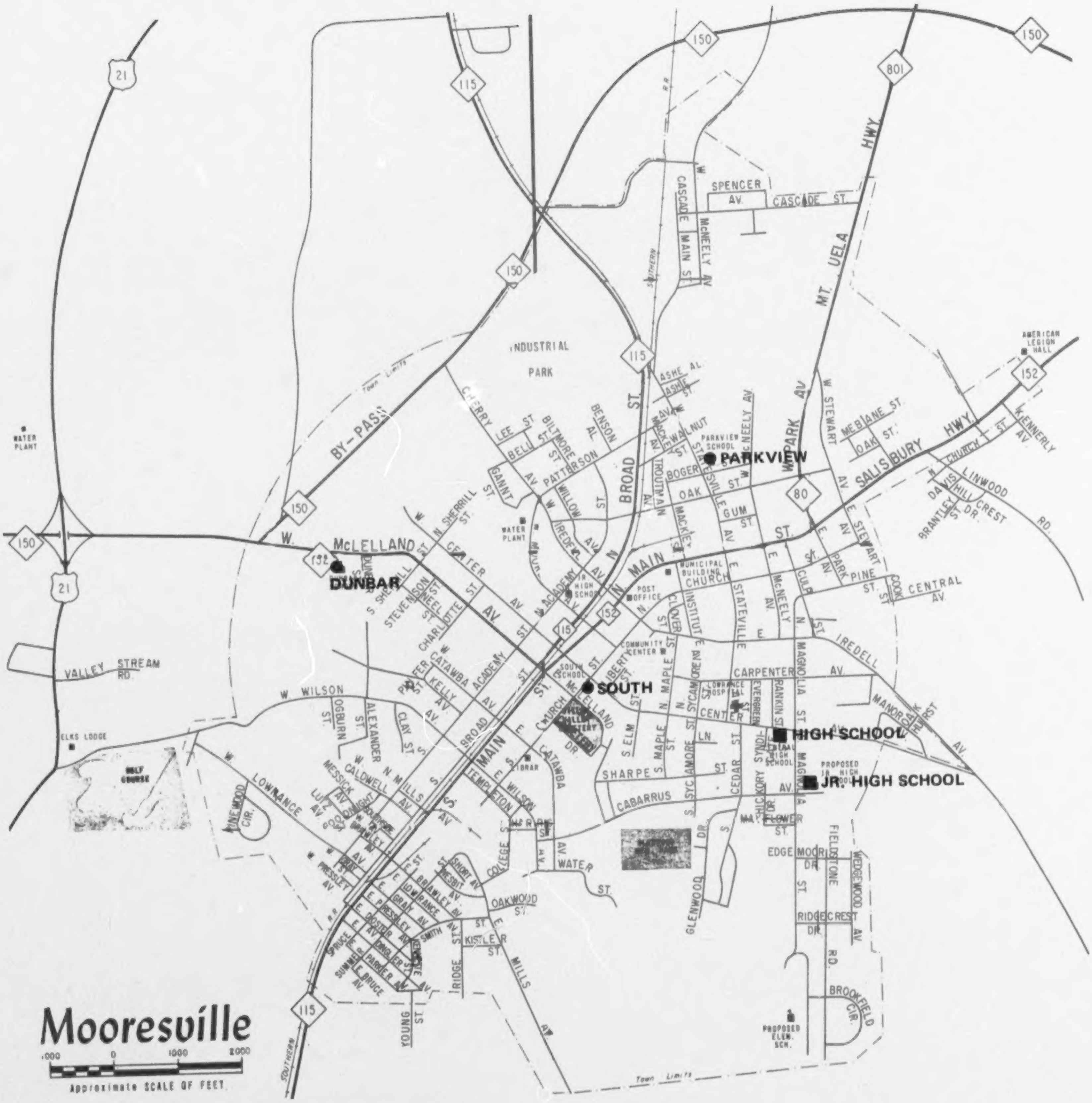
Table 20 lists the elementary schools in Mooresville, and gives the grades housed in the schools, their capacities, and enrollments. Capacities have been calculated at 28 and 25 pupils per classroom.

Map 5 shows the locations of the schools.

Table 20
CAPACITIES AND ENROLLMENTS
MOORESVILLE, NORTH CAROLINA
1969-70

Schools	Grades	No. of Classrooms	Capacity		Enrollment*
			@28	@25	
Parkview	1-4	17	476	425	474
South	1-4	15	420	375	402
Dunbar	5&6, Sp. Ed.	18	504	450	468
Totals		50	1,400	1,250	1,344

* As of April 9, 1970.


Mooresville
1000 0 1000 2000
Approximate SCALE OF FEET
PARKVIEW
DUNBAR
SOUTH
HIGH SCHOOL
JR. HIGH SCHOOL
PROPOSED ELEM. SCH.
PROPOSED JR. HIGH SCHOOL
INDUSTRIAL PARK
WATER PLANT
AMERICAN LEGION HALL
ELKS LODGE
GOLF COURSE
MUNICIPAL BUILDING
POST OFFICE
COMMUNITY CENTER
LOWRANCE HOSPITAL
BY-PASS
McLELLAND AV
MAIN ST
BROAD ST
SALISBURY HWY
MT. ULLA HWY
VALLEY STREAM RD.
W WILSON
CENTRAL AV
IREDELL AV
Town Limits
SOUTHERN
150
115
21
152
80
801

MAP 5
LOCATIONS OF EXISTING SCHOOLS

This map has been adapted from one copyrighted by Champion Map Service, Inc., P.O. Box 6522, Raleigh, North Carolina 27608. Specific permission has been granted for its use in this report to the Iredell County Commissioners.

Parkview

Acreage of site: 7
Year constructed: 1926
Year(s) of addition(s): 1941, 1957, 1963
Grades housed: 1-4
No. of classrooms: 17*
Pupil capacity: 476 and 425
Enrollment: 474

The site should be expanded by another two to three acres (or more) when and if ever possible. The parking area should be enlarged and paved and spaces provided for 40 automobiles. The playing area is satisfactory in size.

The original building is of non-fire-resistive construction. Panic bars need to be installed on all exit doors.

The original building was painted last summer, inside and outside. The 1957 addition needs painting. Some window shades are in need of replacement. Some fluorescent bulbs were burned out and in need of replacement.

The original building has had fluorescent lighting installed, and it is satisfactory. In the addition there are still incandescent lights. They are unsatisfactory and should be replaced by fluorescent lights as soon as possible.

The classrooms in the original building are small and need to be enlarged - from approximately 700 to 900 square feet each. The classrooms in the 1957 addition are about 900 square feet in size and satisfactory.

---

* Two classrooms are used for special purposes: one for reading; one for book storage and as a sick room.

In addition to the classrooms there are:

Library

Gymtorium

Cafeteria and kitchen

Small office

The library is in the basement. Simply because it is in the basement it may be considered a substandard space and should be brought upstairs. In size it is satisfactory, having seating for approximately 40 pupils and housing 7,700 volumes on its shelves.

The cafeteria has seating for some 160 to 180 pupils and is adequate in size for the school. However, it is a hot and airless space. The principal strongly feels that the space is not suitable for a good lunch program.

The principal and secretary share the same small office. This is an unsatisfactory arrangement. The principal needs privacy for conferences. The situation is also distracting for both.

More space is needed for small group instruction. A better space for health is needed.

In 1976 the original Parkview building will be 50 years old. When school buildings reach this age, they should be looked at closely in terms of possible retirement and replacement or in terms of possibilities for renovation. Consideration should be given to replacing the original Parkview building. This means the replacement of the central facilities as well as the 11 classrooms. There are several reasons for this recommendation: the building is of non-fire-resistive construction; the classrooms are too small for an up-to-date educational program; renovating costs would be high.

South School

Acreage of site: 5.5 acres
Year constructed: 1920
Year(s) of addition(s): 1941, 1963
Grades housed: 1-4
No. of classrooms: 15
Pupil capacity: 420 and 375*
Enrollment: 402

The South School is scheduled for retirement by the local school authorities. A site has already been purchased for a new elementary school. Maintenance on the building has been minimal, with the expectancy that in the immediate years ahead the building will be retired.

The consultants concur that the building is ready for retirement. The sooner it is replaced the better.

Maintenance is sadly needed. The roof leaks; it has been repaired by bits and patches. The wooden windows need replacement. Plaster is falling. Painting is needed in the classrooms and various areas of the building.

This is a non-fire-resistive building. Some exit doors need to be equipped with panic bars.

Classroom spaces are small and inadequate for an elementary program. There is a lack of small group instruction spaces for reading and speech. The physical education space is unsatisfactory. The library is satisfactory.

---

* Three of the classrooms are in the basement and can be considered substandard spaces. These rooms can be subtracted from capacity, making this a 12-classroom school.

The building lacks the flexibility to meet pupil and educational needs. South is the kind of school constructed 50 years ago, built to house a program now over 50 years old.

The 5.5 acre site of the school is inadequate. Needed is a site of 10 acres minimal.

Because of these considerations - the small site, its age, the need for extensive maintenance and renovation, the deterioration of the structure, the non-fire-resistive construction, the small size of its classrooms, the lack of a good gymnasium, its lack of flexibility to meet modern-day educational needs - consultants recommend that the school be retired and replaced as soon as possible.

Dunbar School

Acreage of site: 9.5
Year constructed: 1941
Year(s) of addition(s): 1954, 1957, 1959, 1964
Grades housed: 5-6, Special Education
No. of classrooms: 18
Pupil capacity: 504 and 450
Enrollment: 468

Dunbar School is located on West McLelland Avenue in the western section of Mooresville.

The building now serves as an intermediate school, housing all sections of grades five and six in the district. When consultants visited the school, there were seven sections of grade five and eight sections of grade six. In addition, there was one special education class.

There are 18 classrooms in the building. Capacity, calculated on the basis of 25 pupils per classroom, is 450. On the basis of 28 pupils per classroom, capacity is calculated at 504. Utilization of classroom spaces for special education and for special purposes reduces capacity. Enrollment, as of April, was 468.

Dunbar is located on a site of 9.5 acres. The playing area is satisfactory in size. The parking area needs to be paved. The grounds need attention.

In some instances, spaces within the building are not well related and not suited to fifth and sixth grade program. This is because the building has grown bit by bit with a number of additions. More important, it is because the utilization of the building has changed from a grade one through twelve program to the existing grade five and six program.*

Spaces have been necessarily converted. The library is located in the former home economics room. The music room is located below it in the former industrial arts shop.

The original building and the 1954 addition are non-fire-resistive structures. The newer additions are of fire-resistive construction. Panic bars should be installed on all exit doors.

Desirably, class size should be kept down to 25, if at all possible. Smaller class size increases the opportunity for individual attention and instruction.

Two of the classrooms are used for sixth grade science instruction. They share a portable demonstration unit. Desirably, there should be a unit for each room and there should be water in the science rooms.

In addition to the classrooms, there are in the building a gymnasium-auditorium of good size, cafeteria and small kitchen, library, art room, music room, and office.

The library is located in a former home economics room. It is a bright room. The fluorescent lighting is satisfactory. There is seating for 40, and there are 4,000 volumes on the shelves. The immediate need is to increase the number of volumes in this library.

---

* At one time Dunbar housed all Negro students.

When the school was visited by consultants, a number of bulbs were burned out in the classrooms and needed replacement. Painting is needed on the outside trim. Generally speaking, more care should be given to cleaning the building. Painting is also needed on the inside of the building.

As an intermediate school the Dunbar building has several strong points. It has a good-sized gymnasium. It has a satisfactory library. Classrooms are of satisfactory size.

There is a need to renovate the original building. The music room needs to be acoustically treated. A better space for art instruction should be considered. Renovation of the classrooms in the original building should consist of:

1. Replacement of wooden windows where necessary.
2. Installation of work sinks, carpeting, and new window shades.
3. Painting

Summary - Mooresville Elementary Schools

There are some general comments to be made regarding the Mooresville schools, similar to those made in regard to the Iredell schools:

The school sites need to be expanded.

Fluorescent lighting should be installed in all classrooms as soon as possible. Care should be taken to replace burned-out bulbs.

Maintenance needs to be improved on all three buildings.

Standards of cleanliness need to be raised.

Consideration should be given to providing improved health facilities or rooms.

Classrooms are frequently too small for a modern day education program. Classrooms should be combined and expanded to 800 to 900 square feet.

Panic bars should be installed on all exit doors used by children.

The three schools have libraries. The number of volumes needs to increase to meet the standard of the American Library Association.

Books - At least 6,000 to 10,000 titles representing 10,000 volumes or 20 volumes per student, whichever is greater.

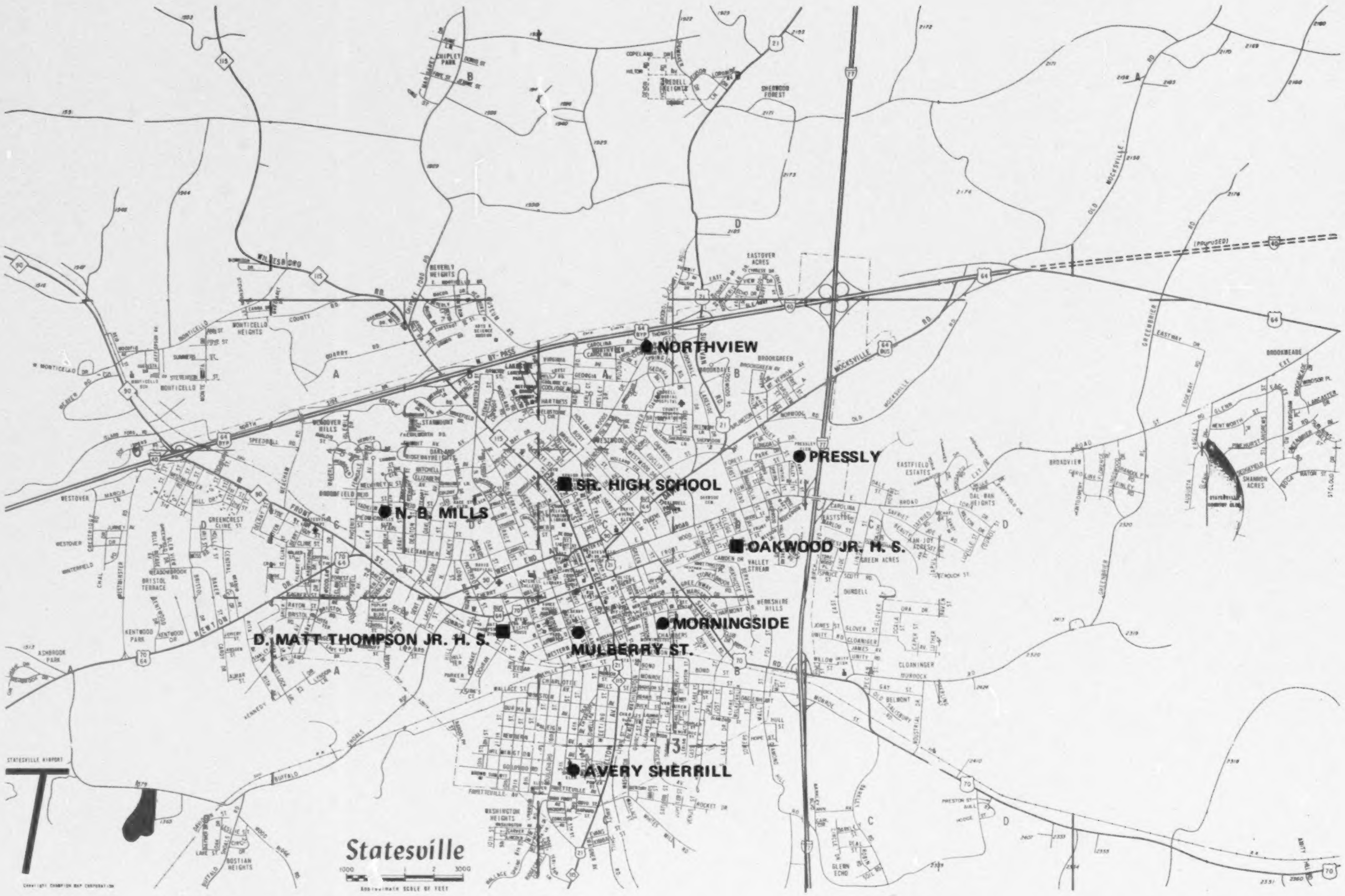
Statesville

Table 21 lists the schools and gives the grades they house, their capacities, and enrollments. Capacity has been calculated at 28 and 25 pupils per classroom.

Map 6 shows the locations of the elementary schools in Statesville.

Table 21
CAPACITIES AND ENROLLMENTS
STATESVILLE, NORTH CAROLINA
1969-70

Schools	Grades	No. of Classrooms	Capacity		Enrollment
Elementary			@28	@25	
Avery Sherrill	3-4, Sp. Ed.	13	364	325	397
Morningside	5-6, Sp. Ed.	18	504	450	432
Mulberry Street	1-2	17	476	425	436
N. B. Mills	1-6	16	448	400	428
Northview	1-6, Sp. Ed.	13	364	325	411
Pressly	1-5	18	504	450	460
Totals		95	2,660	2,375	2,564


NORTHVIEW
PRESSLY
SR. HIGH SCHOOL
N. B. MILLS
OAKWOOD JR. H. S.
MORNINGSIDE
D. MATT THOMPSON JR. H. S.
MULBERRY ST.
AVERY SHERRILL
Statesville

MAP 6
LOCATIONS OF EXISTING SCHOOLS

This map has been adapted from one copyrighted by Champion Map Service, Inc., P.O. Box 6522, Raleigh, North Carolina 27608. Specific permission has been granted for its use in this report to the Iredell County Commissioners.

Avery Sherrill

Acreage of site: 7
Year constructed: 1928
Year(s) of addition(s): 1954
Grades housed: 3-4, Special Education
No. of classrooms: 13
Pupil capacity: 364 and 325*
Enrollment: 397

Prior to the change in school organization in December Avery Sherrill housed grades one through six and is a typical elementary school in design.

The site should be expanded by two or three acres when and if possible. The parking and play areas are satisfactory at present.

The original building was constructed in 1928. The building is brick, but of non-fire-resistive construction. The windows are of wood, as are the floors.

A small addition contains four classrooms.

The fluorescent lighting is satisfactory.

Maintenance on this building has been satisfactory.

---

* Two temporary classrooms (trailers) increase the school's capacity by another 56 or 50.

In addition to the 13 classrooms, there are the following spaces in the school:

Gymnasium-auditorium

Cafeteria and kitchen

Library

Office

The library has been converted from a standard classroom. This space is too small. The fluorescent lighting is weak. There is no needed workroom-office for the librarian. There are 4,047 books on the shelves.

The office is one space. The principal needs a separate office for private conferences.

The use of two temporary classrooms points out the need for more permanent classroom space in this building.

Currently, an addition is being planned to correct the above deficiencies. It is to consist of:

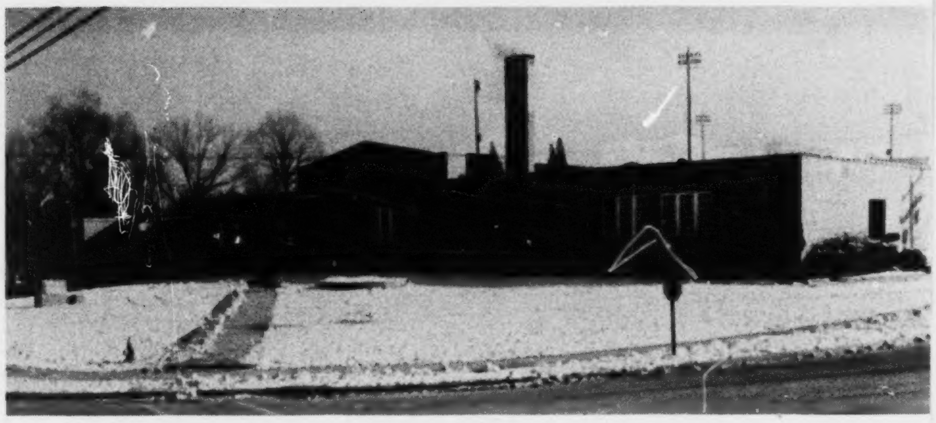
Library

Office for the principal and a separate one for the school secretary

Two classrooms (The construction of a library will make the classroom now used as a library also available for a classroom again.)

Morningside

Acreage of site: 6
Year constructed: 1942
Year(s) of addition(s): 1952
Grades housed: 5-6, Special Education
No. of classrooms: 18
Pupil capacity: 504 and 450
Enrollment: 432



Originally, Morningside was the all-Negro Junior-Senior High School in Statesville. At present, it houses grades five and six and special education pupils, both white and black.

The building is on a small site, but is so placed that parking and play areas are satisfactory.

The building is of non-fire-resistive construction.

Maintenance has been fair. Gang toilets are in need of some repair and renovation.

The fluorescent lighting is satisfactory.

In addition to the classrooms there are the following spaces:

Gymtorium

Music room

Cafeteria and kitchen

Shop

Home economics room

Library

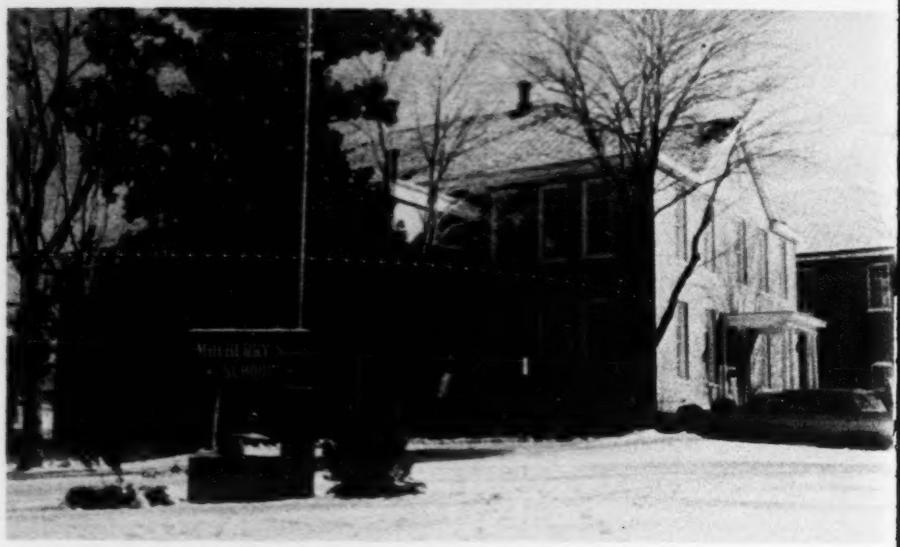
The one-station gymtorium is excellent. The music room is a desirable space for an elementary school. The shop and home economics room are not used for their intended purposes. The latter now houses a trainable group.

The library is large for an elementary school, providing seating for 60. There are 7,000 volumes on the shelves. Carpeting should be installed.

On the hill above the Morningside School there are six additional classrooms which may offer some potential space. They might be used for preschool, Head Start, or special classes.

Mulberry Street

Acreage of site: 2.5
Year constructed: 1893
Year(s) of addition(s): 1910, 1955
Grades housed: 1-2
No. of Classrooms: 17
Pupil capacity: 476 and 425
Enrollment: 436



Mulberry Street School is a venerable old building. For a building of its age, 77 years, it is well maintained. Its age must, however, suggest retirement in the near future.

The site is very small, 2.5 acres. It should be 10 acres in size, at the very least.

The building now houses grades one and two. Formerly, it housed grades one through six.

There are 17 classrooms, but four are in the basement and could be considered substandard.

An old building, it is of non-fire-resistive construction. Fire towers were added in 1955. Panic bars need to be installed on all doors. A sprinkler system should be installed.

Most of the classrooms are not satisfactory for grades one and two. Most of them do not have sinks. More chalkboard space is needed in some rooms. Fluorescent lighting should be installed throughout the building to replace the incandescent fixtures.

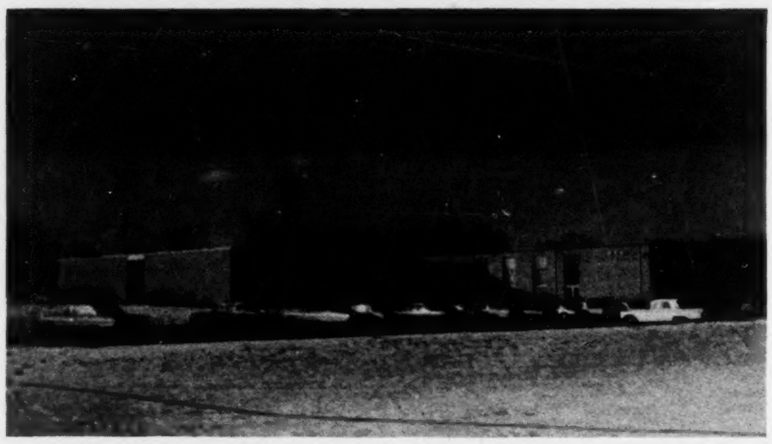
There is an auditorium and stage. The cafeteria is a small space. The library is small, capacity 25. There are about 4,500 volumes on the shelves. The fluorescent lighting is weak. The librarian has no workroom.

A gymnasium or playroom is needed.

The consultants are aware of the sentiment for this school. However, consideration should be given to phasing this building out within the next 5 to 10 years.

N. B. Mills

Acreage of site: 7
Date of Construction: 1951
Year(s) of addition(s): 1964, 1966, 1968
Grades housed: 1-6
No. of classrooms: 16
Pupil capacity: 448 and 400
Enrollment: 428



The site of N. B. Mills is somewhat small, and should be expanded by three acres at least. Parking and play areas are satisfactory in size. If and when the building is expanded, more acreage will be desirable.

The maintenance on the building has been satisfactory.

Some classrooms in the original building are small. The incandescent lighting in the original building is unsatisfactory and should be replaced with fluorescent fixtures.

In addition to the 16 classrooms there are the following spaces: auditorium, stage, lunchroom. The latter space has screen doors opening inward. For safety, exit doors should open in the exit direction.

The newest addition includes an excellent elementary library. It has a seating capacity of 30. There are about 5,100 books on the shelves. It is carpeted and air conditioned. It is well equipped and has eight wired carrels.

There is no gymnasium in the building. For a grade one through six school a gymnasium is desirable.

At present, a three-classroom addition for primary pupils is being planned for N. B. Mills.

Northview

Acreage of site: 7.5
Year constructed: 1960
Year(s) of addition(s): 1962, 1965
Grades housed: 1-6, Special Education
No. of classrooms: 13
Pupil capacity: 364 and 325
Enrollment: 411

Northview is an attractive brick building. It is of contemporary design and of fire-resistive construction.

Basically, maintenance has been satisfactory. Some parts of the school needed cleaning when the consultants visited it.

The site needs to be expanded by three acres at least.

Capacity of the building has been increased by the use of a substandard space beneath the stage and by the use of a trailer classroom. A four-classroom addition is being planned for the school.

Classrooms are satisfactory. In addition to these spaces, there are the following:

All-purpose room (serves as auditorium, gym, and lunchroom)

Kitchen

Office

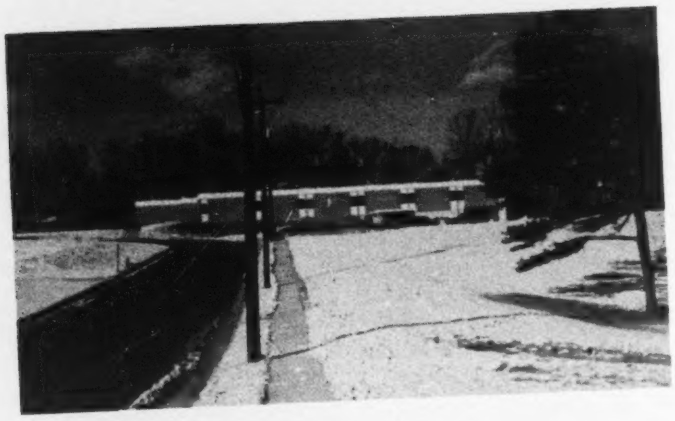
Clinic

Library

The elementary library is small and seats about 25 to 30. It should be enlarged. There are 5,300 volumes. The fluorescent lighting is satisfactory. Carpeting and drapes are needed.

Pressly

Acreage of site: 8+
Year constructed: 1966
Year(s) of addition(s): -
Grades housed: 1-5
No. of classrooms: 18
Pupil capacity: 504 and 450
Enrollment: 460



Pressly is an attractive elementary school, particularly on the inside. It is a building of which the community can very well be proud. There are some outstanding facilities in the building:

The classrooms are of good size. The fluorescent lighting is satisfactory. All rooms are carpeted. There is a work sink in each room. There is also a projection screen in every room.

The library can seat about 50 pupils and another 6 in a small conference room. There are 6,300 volumes on the shelves. The library, like the classrooms, is carpeted. It is also air conditioned. There is a good-sized workroom-office for the librarian. It is a well equipped space. Several carrels for individual study would be desirable.

There are also a large cafetorium, which can be used for physical activities and a large commons or entrance area.

This is a new building of contemporary design and of fire-resistive construction. Maintenance has been satisfactory.

Parking and play areas are satisfactory in size. The play field needs to be developed.

This is not a perfect elementary school, however. The principal noted a shortage of toilet facilities for the upper grades. There are no small group rooms for small group instruction.

School Administrative Center

Statesville's school administrative building is located on Race Street. In size and in spaces the building is satisfactory for this purpose. The parking area needs to be paved.

Originally, the building was a small elementary school, consisting of six classrooms with a capacity of 150 to 180. There were also a library and an all-purpose room.

Although the building can always be converted to an elementary school again, it should probably remain an administrative center in view of its small site (four acres), location, and small size (capacity).

If and when the schools in the County consolidate, this building could serve as an administrative center for the entire County. If so, expansion of the building will be necessary. The four-acre site will be adequate for this purpose.

Summary - Statesville Elementary Schools

As with Iredell and Mooresville, there are some general comments to be made regarding the Statesville elementary schools:

The sites tend to be small and should be expanded when and if possible.

Classrooms in some cases are too small for the elementary program.

Several of the buildings need indoor areas for physical education (Mulberry, Mills).

Where not yet installed, fluorescent lighting should be installed as soon as possible.

Panic bars should be installed on all exit doors used by children.

The number of volumes in each library should be increased to meet the standards of the American Library Association.

III

EXISTING FACILITIES - SECONDARY SCHOOLS

Secondary education is administered differently in the three school districts within Iredell County. The County, having an 8-4 program in the north and in effect a 6-2-4 program in the south, provides a four-year high school curriculum which helps individualize the high school program. The existence of small junior high programs in northern schools is a limiting factor in offering diversified experiences for seventh and eighth graders under specialists and in appropriate facilities. Although the southern junior high annex is associated with the Troutman School, it is operated as a centralized junior high school.

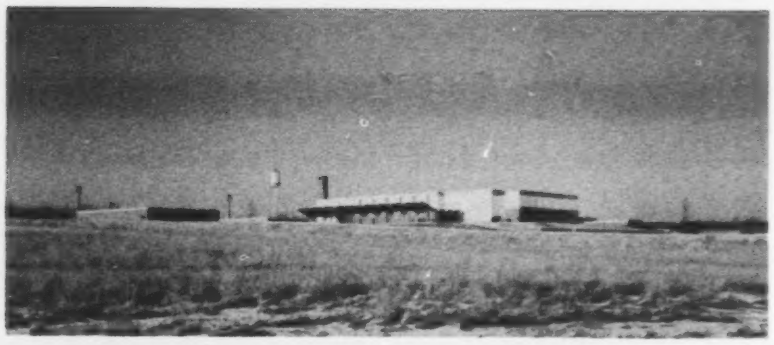
Statesville operates two junior high schools with grades seven through nine and a three-year high school. Since ninth grade is not placed with grades ten through twelve it is difficult to offer a few advanced students accelerated courses. Also in a four-year high school, vocational students can have a longer sequence in specialized facilities.

Mooresville practically has an educational park, with a seven through nine junior high and a ten through twelve high school near each other. There is some exchange of faculty and students at the moment; this policy should be encouraged and possibly extended to allow advanced ninth graders to have some courses in the high school. With an educational park, the advantages of a nine through twelve high school over a three-year high school are minimized.

The existing school buildings have been reviewed by your consultants with concern for implementation of curricular programs. It was also useful to conduct a uniform review of facilities to provide some data when contemplating consolidation. Building conditions, capacities, and maintenance programs are pertinent information to have when considering consolidation. The following comments are not comprehensive in every facet of the curriculum. The major problems are mentioned when consolidation may affect their solution; some of the successes are mentioned when pertinent to solving another's problem or when integral with strong school spirit.

Iredell County Schools

North Iredell High School



General Notes

North Iredell High School is located on a large 51-acre site in Olin. There is a possibility that a convenient access to extend Interstate Route 77 will be built, thereby improving travel time to other sections of the County. At present, travel is not burdensome to the temporary end of 77. Proximity of a portion of its district to Wilkesboro has established some pupil awareness of the Wilkes Community College program. Although Winston-Salem and Hickory will be within especially close traveling distance upon completion of Interstate Route 40, the area will probably trail the southern half of the County in suburban development. The curriculum and facilities in the northern portion of the County need not, and should not, be a duplicate of facilities in the south.

The school was opened in 1966, the 500-seat auditorium building was added in 1967, and four additional classrooms were added in 1969. A portable classroom is in use for special education. Central facilities and the auditorium building are air conditioned. (This includes library, guidance rooms, two seminar rooms, offices, teachers' lounge, band room, two regular classrooms used for distributive education and industrial cooperative training, and a large multipurpose room now used for weight-lifting.) Ventilation in the rest of the building is adequate.

Locker facilities are inadequate and some cracking of cement around the campus-style buildings and walks evidently occurred last winter. Outside stairs, although enclosed by perforated brick shielding, may prove hazardous in snowy weather. Unless the school is to be kept closed during such periods, this hazard should be eliminated.

The capacity of the building is 960 students at 80 per cent efficiency. (Efficiency is not 100 per cent since rooms may not be occupied every period of the day and classes are not completely full.) Although classroom capacity can be larger than 27, it is expected that accreditation may even require 25 as an average class size. Table 22 explains the capacity calculation.

Table 22
CAPACITY OF NORTH IREDELL HIGH SCHOOL

Area	No.	No. of Pupils	Capacity
Classrooms	24	27	648
Special classrooms	1	20	20
Language laboratory	1	25	25
Science classroom-labs	6	24	144
Typing rooms	2	30	60
Office practice room	1	20	20
Home economics rooms	3	20	60
Vocational shop	1	20	20
Mechanical drawing and related classrooms	2	24	48
Art room (not specialized)	1	20	20
Music room	1	35	35
Gymnasium	1	35	35
Exercise room	1	30	30
Health room	1	35	35
Total theoretical capacity (100%)			1,200
Capacity at 80 per cent utilization			960
Approximate present membership			1,360

As at South High, overcrowding can be accommodated with the sacrificing of certain instructional methods. The teaching of English in the art room is an excellent example of impeding efficiency. The current membership of about 1,360 is 400 students above the recommended capacity. Central facilities are suffering from such overcrowding. Specialized facilities are not adequate. Teacher work and office areas, as well as limited lounge facilities, are not adequate. Student lounge facilities do not exist; corridors and lobbies are used during inclement weather. The school is still heated by coal, whereas South High is gas fired. Settling may have been more of a problem with North High than South, since some cracking at windows, corridor floors, and concrete work has occurred at North.

Athletic Program

The condition of the locker rooms is exemplary, but the size of facilities is too small at least in the girls' shower area. In addition to instruction in the usual team sports, there is a weight-lifting or body-building program. With the development of community centers, as in Scotts, it would be advantageous for the physical education program to be active on Saturdays and during summers. Carry-over sport instruction is needed, as it is elsewhere. Consolidation of all physical education staffs could utilize the talents of more teachers in distributing units of instruction throughout the County. Although some governmental units (e.g., Statesville) have recreation commissions, it is suggested that, if consolidation occurs, the County create a recreation program which would blend recreation and school personnel. Outdoor programs in camping could supplement the school program eventually. This is relevant for science study and could utilize talents of vocational agriculture teachers. (The design and building of camping and trail facilities could be considered a unit in the forestry curriculum.) With the combined talents of teachers in many departments, the creation of an outdoor education program would find greatest expense in teacher salaries, not construction. Land is available at modest cost in North Iredell for such a use, or Duke Power land near Lake Norman might be secured. It is also possible that part of the North High School site could be used. Its proximity to vocational facilities might facilitate construction.

Occupational Education

A healthy vocational program has existed at North High School in distributive education, industrial cooperative training, and vocational agriculture. Since vocational agriculture teachers have lived and taught in the region prior to consolidation of the County high schools, roots are deep within respective communities. The vocational program has done much for the school and community in the way of projects. Whereas 4-H is strong in the southern County (witness the winners of State honors announced in the paper), the Future Farmers of America is of extremely high calibre in the north. FFA is integral with the curriculum and has served as an all-school activity encouraging leadership and poise. It has been open to more students than is usual in most sections of the country. Since recent national revisions have been made regarding girls, the FFA should be continued in light of its success. Club facilities do exist within the vocational department, although they are modest. The reliance on the FFA to support portions of the educational program has instructional advantages but probably more disadvantages.

Adult education facilities and office space for continuing a heavy logistical and specialized information system are provided at present, although not in lavish manner.

Shop facilities (mainly woodworking) are a clue to the reason for high efficiency in utilization of the school. The facilities are capable of housing one class which could be team taught with, at the most, 30 students. In addition, much instruction is done outside, including an agricultural machinery shop-shed using a polyethylene drop as a windbreak. Project storage is limited. Greenhouse facilities, built and heated by FFA monies, are modest and do not allow sophisticated experiments or large-scale greenhouse management practice. The facility is a small-scale commercial facility used to raise plants for sale in order to raise money for vocational programs. Certain aspects of the FFA program and agricultural curriculum should be retained. There is need to retain student practice of money management in the program, but sophisticated aspects of technology and teaching of more skills should be introduced. Student time should be treasured as it will be in later life. A case in point might be installation of automatic irrigation or sprinkler systems on even some small projects rather than watering of plants by hand. Such improvements take money, and FFA cannot be expected to supply such funds.

More integration of science and agriculture course work is suggested. Agriculture offers a broad spectrum of application of theory which can increase achievement in academic subjects. By the same token, career guidance into applied science, mathematics, and communication arts can be given by making students aware of such occupations as plant physiologist, hydrologist, statistician, and technical writer. Most schools are far from realizing such cooperation; Iredell schools are so close to such an ideal curriculum that it would be a shame to let the opportunity slip by.

It should be understood that agriculture graduates have entered a wide variety of occupations. This does not mean other courses should not be offered to students. The chapter on vocational education gives specific recommendations. In view of limited facilities, changes in the curriculum must proceed with caution in order to provide proper starts for new courses. Upgrading of the agriculture program is another option in contrast to our recommendation for South High School. It seems appropriate to recognize differences in the schools and to continually evaluate different changes in the occupational programs. (An example may be the institution of a new construction trades course. Without adequate indoor facilities, most instruction may have to occur outside. This means that bricklayers, plumbers, etc., are to be hired during their better seasons. Not only is there a scarcity of certified vocational teachers, but salaries are not very competitive in Iredell County. For a new program to start in this situation is less auspicious than first building an indoor facility and then arranging employment of non-certified practitioners as instructional aides during off season.)

Distributive education and industrial cooperative training do not have specialized facilities. In the future, these programs should be primarily out-of-school capstone activities to programs in the entire occupational curriculum. Where possible, specialists in agriculture should help in supervising agri-business students, home economics teachers may supervise students in geriatric care, and business teachers in office practice. As more in-school programs develop, the cooperative training facilities will be mainly coordination facilities involving counseling, office, interview, and seminar spaces. Distributive education might be involved with any school store or concession but should also have classroom and office space.

Business education has facilities similar to South High School. The fee system and lack of space are limiting to this program. Support for the secretarial training program should be upgraded. A reputation outside North Iredell has been made by some of the preconsolidation schools in secretarial training. Business education also has much in common with distributive education and vocational agriculture. A future farmer or agri-business manager should be a product of a joint occupational program involving sales theory, agricultural knowledge, business law, economics, knowledge of where to obtain financing, and bookkeeping. The nature of agricultural operations lends itself to cooperative effort.

The home economics facilities appear to be adequate for nonoccupational training. There appears to be a dearth of occupational training for girls, and this must be corrected, but the home economics courses probably cannot train for well paying, prestigious jobs. This is no reflection on the department; in other sections of the United States, the same necessary occupations are better paid.

Science Department

The staff has made significant attempts at introducing laboratory-oriented courses, but crowding and inadequate facilities have impeded curricular revision. Sinks and counters are still to be installed in two rooms. Electrical service in physical science seems inadequate. To implement new school-year and summer programs which the present staff can envision, more central office support is needed in logistics and budgeting. Consolidation may allow such coordination from high school staffs. The science department should utilize facilities of the school's site as well as coordinating activities with vocational agriculture and home economics. Physics enrollments should be increased or a course such as the Engineering Concepts Curriculum Project * could be introduced.

Office space for laboratory-oriented programs is insufficient. Hot water is provided with a separate heating unit in one of the small storage rooms. Laboratory fees are still the only dependable source of funds. Fee systems should be abandoned.

A program to stimulate girls to go into laboratory technology might alleviate the problems of finding prevocational programs for girls. Such a program requires more equipment than at present.

---

* Address: Polytechnic Institute of Brooklyn, 333 Jay Street, Brooklyn, N. Y. 11201, Attn: Dr. E. J. Piel.

Fine Arts, Music

The art room lacks plumbing facilities and the space and storage areas needed for a full art program. English is also scheduled in the room, demanding full clean-up in limited space. It is suggested that outdoor art and landscaping layout (with concrete work and sculpturing) might work into a joint program with agriculture classes. Display areas around the school could be provided for student art. The room should be equipped for slide projection.

Band facilities and the choral program appear to be adequate. The department could profitably join other systems in structuring a countywide program. Facilities are air conditioned and were operating well at North. Local support for a summer cultural program could undoubtedly be aroused.

Other Areas

Strong capabilities in the mathematics department suggest the advanced placement calculus could be offered if consolidation could allow capable students to come together. Once again, the pooling of talent from all school systems could help in curricular innovation throughout the County.

The social studies department could also investigate new methods of exploring such areas as vocational history, problems of agriculture and small business, and significant factors in the U. S. economy. As students become more occupationally conscious, problems will take on more meaning. Thus, the influence of large national poultry companies in buying out small owners is one example of a pertinent topic which rarely finds its way into adopted textbooks. Again, inservice training and curricular workshops need to be supported.

Library and Other Common Facilities

The cafeteria is overcrowded here and at South High School and the kitchen should be watched closely for overload. At present, the cafeteria is used partially as an instructional space. Freezer and storage areas are adequate at present, although dry storage is crowded at times.

The library has crowded storage and processing facilities. An adjunct classroom is utilized for a class now. Shelving is full and floor space will soon be used for more books unless adjacent classrooms are used for stacks. Air conditioning did not seem adequate at the time a visit was made. The program of the library is exemplary, as at all the libraries in Iredell.

South Iredell High School

General Notes

Located in Barium Springs, the County's southern high school enjoys a spacious campus on 37 acres. The original building was opened September 1966, a 500-seat auditorium building added in 1967, and six classrooms added in 1969. Central facilities and the auditorium building are air conditioned. (This includes library, with seminar room, guidance rooms, offices, band room, one small classroom used for reading, two regular classrooms used for art and distributive education, and a large group room used for adult education.) Ventilation in the rest of the buildings, with the possible exception of the locker rooms, is adequate. During the consultants' inspection, the air conditioning in the band facilities was not functioning well.

Outside stairs are not always snow free. The possible hazard of slippery stairs and landings might be corrected by measures suggested by the Division of School Planning. The use of infra-red lamps might be investigated. (This condition also occurs in other schools.)

The capacity of the building is about 1,025 students at 80 per cent efficiency. (Efficiency is not calculated at 100 per cent since rooms may not be occupied every period of the day and classes may not be completely full.) Even at a calculated 100 per cent efficiency, the school is housing morestudents than its theoretical capacity as figured in Table 23. This means that class sizes must be large for the physical space provided, and some administrative measures are in force which may hamper the instructional program. The vocational agriculture program absorbs some overflow from its shop in outdoor activity.

Table 23
CAPACITY OF SOUTH IREDELL HIGH SCHOOL

Area	No.	No. of Pupils	Capacity
Classrooms	26	27	702
Speech classroom	1	20	20
Language laboratory	1	25	25
Large classroom	1	50	50
Science classroom-labs	6	24	144
Typing rooms	2	30	60
Office practice room	1	20	20
Home economics rooms	3	20	60
Vocational shop-multipurpose	1	20	20
Mechanical drawing and related classrooms	2	24	48
Art room (not specialized)	1	25	25
Music room	1	35	35
Gymnasium	1	35	35
Health classroom	1	35	35
Total theoretical capacity (100%)			1,279
80% efficiency			1,023
Approximate present membership			1,375

The school lacks the student lounge facilities available in the city schools; lobby and corridor spaces house students during lunch breaks in inclement weather. Teachers' work and lounge facilities are not sufficient: e.g., one toilet serves 65 teachers. Guidance facilities are also crowded. Although newer, the facilities in the County offer little luxury in space.

Athletic Program

Locker room facilities and gymnasium facilities are taxed, since additional classrooms have added a load on such central facilities. Ventilation was poor in locker rooms when visited. (Since this was not the case at North High, one wonders if the locker rooms are overloaded or if the system is not operating correctly. Auxiliary heating may be needed when exhausting air from showers and lockers.)

With increased enrollment, there will be a tendency to emphasize team sports which are generally not those sports carried over into adult life. Attention should be given to summer recreation programs in the entire County; these types of programs in conjunction with the present athletic program could give the needed attention to carry-over skills.

At present, girls are not able to elect junior or senior physical education because of overcrowding; summer programs would be an excellent addition for the teaching of carry-over sports which can mean much to a girls' social life and physical well-being.

The location of the health classroom adjacent to a noisy gymnasium does create less-than-desirable environment for discussion-type classes.

Occupational Education

Both of the County schools have well developed distributive education, industrial cooperative training, and vocational agriculture programs. As the nature of the southern Iredell population changes, vocational offerings should also change. This is discussed in detail in the vocational chapter. The present general shop (including welding booths) is the only specialized facility given to occupational training, aside from a crowded business suite which has little specialized design. There also exists a greenhouse facility inadequate for possible expanded programs in greenhouse management. Land adjacent to the school could be used for nursery stock as suggested in the vocational chapter.

In vocational agriculture the storage facility for paints and volatiles is not ventilated and should be improved with modern safety-cabinet storage or by the use of abandoned refrigerators, etc. There is not enough room to run the present program under full cover; outside work is necessary. Project storage space is practically nonexistent and tool rooms offer little chance for expansion of the program.

The business department is crowded and functions on the outmoded fee system for purchase of equipment. No school program involving expensive equipment can provide exemplary training experiences when fees or club dues and project monies are the main budget determiner. Maintenance and machine purchase should be included in the school budget. Even if more office machines were purchased, there would be no room for them at the moment.

Home economics has purchased its sewing machines by fee. The stress is mainly on homemaking skills and consumer economics. Custom sewing and tailoring might be introduced, but wage scales are not such as to encourage enrollment at this moment.

In general, occupational facilities are not adequate to support more than is happening at present. The nature of vocational agriculture allows the teaching of as much as is being done. The mechanical drawing room should be relocated if the recommended program in the vocational chapter is introduced. The present room could be used for special applications in landscape drafting, surveying, etc.

Considering staff abilities, consolidation might allow some exchange of personnel for units of instruction, such as surveying, with Mooresville. It is suggested that occupational facilities in South Iredell High School be changed to more suburban occupations.

Horticulture - greenhouse, nursery, and landscaping - facilities should be used for Introduction to Vocations with enough machinery repair and general advanced shop for the agriculture majors remaining. Forestry could be worked into nursery work, primarily using outdoor facilities. Any change in curriculum must be done with staff consultation, since the lack of facilities for a varied program demands construction before implementing curricular ideas.

There is opportunity to expand the business department into more advanced office practice with new facilities and into joint management instruction (with distributive education and bookkeeping courses with students possibly going into business for themselves a few years out of school. Vocational agriculture graduates may enjoy expanding this phase of their curriculum.

Science Department

Again, the overcrowding of the school has had its consequences in instructional technique and philosophy. When classroom-laboratories are as crowded as they are at present, science is more naturally taught with a textbook rather than an inquiry, laboratory-oriented approach. Storage space and equipment are lacking for any heavily laboratory-oriented course. This is a direct function of financial support. Services are somewhat limiting in physical sciences, although a hot water unit does service the department. Some counters are still waiting to be installed (Rooms 204-203), but because of this situation a few more students are able to fit in the rooms affected. Residual roof problems still exist, as in the preparation room of 204.

The present building and staffing arrangements do not allow small group discussions. Use of the large adult education room and some of the small auxiliary rooms in the building might be ingeniously arranged to allow exploration of non-laboratory aspects of science, such as the impact of scientific endeavor on many aspects of world history. Again, it appears that interdisciplinary instruction could be developed more easily through consolidation, since the instructional staffs of both Mooresville and the County schools indicated interest in this aspect of the modern curriculum.

There are ventures which South Iredell could explore with the science department which might be germane to occupational preparation. These programs might also be given in the summer to enrich a student's school experience. Environmental science programs could be given in conjunction with 4-H work and the various agricultural personnel available in the County. Applied training in laboratory technology might be introduced with help from industry, medical facilities, and technical institutes; the purpose of this program would be to acquaint students with opportunities in laboratory technology and to demonstrate what attitudes are necessary in this field. There should be a close relationship between horticulture and biology: dual use of facilities could offer benefits of both programs to students' increased experiments with living materials would be the goal for the science department. The facilities of a school are not only in its building, but also involve the site and the community. A consolidated system might make some development monies available to start economical programs.

Because of scheduling problems, it is not possible for each science teacher to have his own room. This has proved to be a handicap in organizing for laboratory programs. Office space in preparation rooms adjacent to the classrooms can alleviate the disorganizing influence of moving books and papers from room to room. Laboratory orientation takes heavy amounts of preparation time, usually after school. Laboratory orientation also requires textbook financing which may be hindered by State adoption lists, such as the omission of the Chemical Education Material Study Text from the State list; the laboratory blocks of the Biological Sciences Curriculum Study, such as "Plant Growth and Development" and "Regulation in Plants by Hormones" are further examples of appropriate texts which may be available under new State regulations for auxiliary texts.

What has been said is a generalization of problems in the high school. Physical science instruction appears to be activity-oriented and staff members are ready to start curricular innovations; staff must be given funding, room, and guidance to implement any new teaching techniques or courses. With consolidation, the training of teachers at summer institutes might be better coordinated, so that there is less duplication and more variety, or so that concentrated attention may be given to curricular problems in certain areas each year.

Fine Arts, Music

The cultural awareness of County students must not be neglected with the County's preoccupation with vocational education reform. As many new families move into southern Iredell, the experiences of the population will be broadened: they will expect more. The native population in rural America also looks to its schools to broaden its knowledge of the arts. Iredell County is not isolated from the arts; a little effort to raise art and general music education in all systems may remedy a long-standing problem. Consolidation might bring the teachers from throughout the County into a more effective department, but professional association outside of school hours may serve the purpose even without consolidation. Interdisciplinary studies can be increased with proper facilities, including visual aids which need not be duplicated in each system. Existing facilities lack storage and services necessary for even a proper self-contained program. Fine arts in South Iredell is coordinated with English and social studies to some degree. Corridor displays and outside sculpture and landscaping might be expanded at minimal cost.

The music program, with possible summer program supplements, needs to be expanded beyond performing classes. There is indication that, in conjunction with other systems, a group of students may like to look at occupations in music. Whether or not South Iredell could support an expanding music program by itself can only be decided by asking students. It is obvious that the County will be in the best position to fill such classes because of the size of its schools. Other units may wish to join in summer enrichment programs. Suggested classes for a County program include:

1. General music
2. Music appreciation
3. Beginning chorus
4. Advanced chorus
5. Theory (small group)
6. Band (and possibly a County-wide orchestra involving all systems)

Crowded conditions encroaching on specialized rooms can hinder instruction especially in instruments and art. A room not designed especially for art will necessarily be less suitable for free period use since clean-up is hampered. Again, overcrowding and economy have taken their toll in teaching methods.

Other Areas and General Comments

As is the case in other systems in the County, the college-preparatory curriculum is performing adequately. Additional supervisory positions are needed to organize faculty discussion and manage inservice training in all curricular areas. The County staffs have much to contribute in curricular development.

The low pay of teachers in the County may be alleviated by offering summer employment which fills a need for which taxpayers or parents are willing to pay. Proximity to the Mecklenburg system creates an especially attractive wage boost for talented teachers who accept employment a short distance to the south. What attracts teachers to Iredell, aside from family ties, is the opportunity to practice in a favorable educational environment. This environment will deteriorate without adequate capital and operational funding. The ability to guide educational policy can also be used as an attractive job benefit: a consolidated unit may offer even more supervisory opportunity than the County system alone.

Library and Other Common Facilities

The library is in keeping with the generally high calibre of library facilities in the area, but does lack ancillary spaces for periodical storage and machine use. The library is economically designed and would have to be expanded if it continued audiovisual and ancillary services for many more students. An adjacent classroom (possibly 112) might be used for work and storage areas.

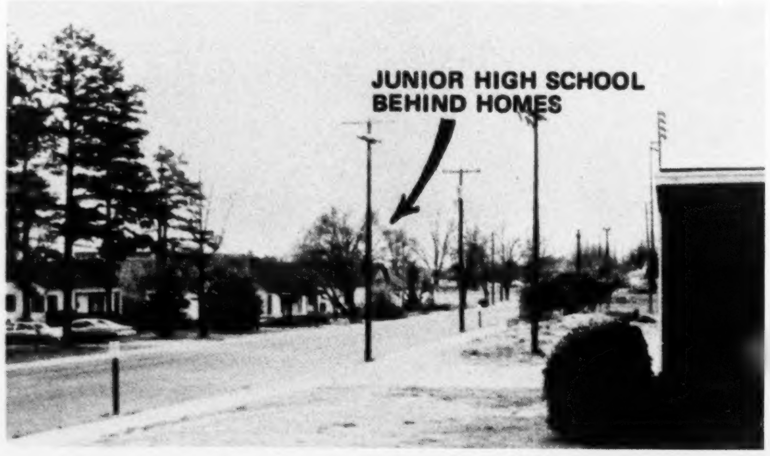
The cafeteria and kitchen facilities should be watched closely as enrollment increases. Expansion of this facility may be needed, but the provision of student lounge room might alleviate crowding if a small milk bar were constructed for those bringing lunch.

Mooresville City Schools

Mooresville High School

General Notes

Mooresville High School, originally built in 1948, had additions of classrooms, shop, and library space in 1955 and 1968. The gymnasium was added in 1958 and a 1,400-seat community auditorium in 1962. The existing school site has only 10.3 acres but, in conjunction with the nearby junior high school, has room for expansion. Relocation of the athletic field would allow additions to be contiguous with the present building, or future buildings could be separate and located across the street near the junior high school.



High School is at right. Junior High School is distant left. This street (Magnolia Street) separates High School and Junior High. This area could form an expanded educational park.

The present building has ventilation and lighting problems which might be evaluated by the engineers of the Division of School Planning prior to decisions on the future of this three-story building. Ability to darken rooms is generally lacking throughout the building. Without proper ventilation, the showing of movies and other audiovisual presentations with darkening shades produces heat problems on warm sunny days. Library facilities cannot be expanded easily in the present location. Additions to the present building would probably be unwise unless accompanied by improvement of existing facilities.

The total capacity of the building is about 635 students at 80 per cent utilization. This provides space for temporary increases in enrollment or expansion of some facilities such as those needed in art and drafting. Capacity is estimated for specific areas as shown in Table 24. Efficiency is not 100 per cent since rooms may not be occupied every period of the day and classes may not be completely full.

Table 24
CAPACITY OF MOORESVILLE HIGH SCHOOL

Area	No.	No. of Pupils	Capacity
Classrooms	18	27	486
Language laboratory	1	25	25
Science laboratories	2	24	48
Typing room	1	30	30
Office practice room	1	20	20
Home economics room	1	20	20
Vocational shop	1	20	20
Mechanical drawing room	1	23	23
Art room	1	16	16
Music room	1	35	35
Gymnasium	1	35	35
Study hall-lounge area	1		35
Total theoretical capacity (100%)			793
80% efficiency			634
Approximate fall membership			516

Athletic Program

Facilities for the athletic program are adequate for a relatively small high school. In conjunction with community facilities and land near the junior-senior high schools, carry-over sports could be taught in summer programs or with increased staff. Physical education can be elected by juniors and seniors since facilities are not at present overtaxed, but the variety of program might be increased by more cooperation with recreation commissions. Instruction in swimming may also be a needed skill unit with increased use of Lake Norman.

Occupational Education

A large multipurpose shop facility has been recently added to the building. For a small number of boys, general training in the construction trades is given with individual attention. The program should be expanded. There is little chance of instituting a general wood-project industrial arts course in the high school facilities. Storage space is at a premium. The present construction course could prove interesting and worthwhile as an elective if more staff were added in a team-teaching situation. Project work is done in the field as well as within the school facility.

A poorly lit drafting room (considerably below State standards) is used part of the day by a versatile instructor teaching in the junior and senior high schools. The room is crowded; an expanded program (utilizing the room for four more periods) might bring enough pressure to remodel. Sheet metal, mechanical, architectural, and topographical drafting (possibly given in an expanded program) would require larger facilities with advanced tables and more storage. The first year of drafting could normally be given to ninth graders. An added staff member could fit into expanded drafting and present shop facilities. Although small, the Mooresville program offers a staff knowledgeable in many areas of shop-oriented occupational education.

Home economics is primarily consumer oriented. The room appears to be inadequately lighted. Ventilation is a problem on warm days. The present all-purpose room is fully taxed in program and space. It would be possible to teach basic tailoring and basic home economics to boys if demand for such a course was felt; if carried out, this might curtail some of the present program.

Distributive education offers a broad program, even giving attention to special education students. The lone teacher in this area should not shoulder such a large burden of diverse students. An expanded program in occupational education could give more group work within the school with distributive education giving on-the-job training in the senior year. Management aspects of business should also be introduced in conjunction with the business department. Facilities provided lack specialization but seem adequate for one teacher.

Business education has attracted one-fourth of the school's enrollment in typing and a few girls of high calibre in the secretarial program. Financial support for equipment and expanded facilities are necessary to broaden training. There is a tendency for bookkeeping students to go on to college; opportunity may develop for expanded occupational education courses to give instruction to those who may wish to start their own businesses. A cooperative training program with businesses in Mooresville is recommended.

Science Department

The proximity of a diversified staff in junior and senior high schools indicates an opportunity to offer more subject areas, such as senior geology, and improve laboratory aspects of the curriculum. The introduction of new courses such as the Engineering Concepts Curriculum Project could be worked into junior and senior years. ECCP does not need special facilities, lack of these has limited curricular expansion in Mooresville High School. A small number of students are taking science after the usual course in biology. This may indicate that science, as now taught, is not exciting to students. Your consultants believe that the facilities hinder teachers in presenting inquiry approaches to science. Problems are as follows:

1. Classrooms are separate from laboratories. Laboratories should be available for laboratory work at any time. At the beginning of a course, each science teacher may wish to set the pace of the course by being in the laboratory for a solid week or two. Classroom-laboratories are more suitable in inquiry, laboratory-oriented teaching.

2. Water, gas, and electric service are limited in the laboratories. Better peripheral services are needed for some biology and physics. Chemistry and biology can utilize fixed equipment which is now located in the physical sciences laboratory. Hot water is a great advantage in clean-up of apparatus; the lack of it may unconsciously influence teachers to avoid "messy" experimentation.

3. Ventilation and lighting levels in laboratories are substandard in our opinion and should be checked by engineers from the State Department of Public Instruction. Storage space is inadequate

and poorly ventilated. The physical science laboratory is cramped; physics might better utilize the biology laboratory for some experiments.

4. More use might be made of the woods around the junior high school by provision of a field station or relocation of science facilities.

To some degree, the textbook adoption system in North Carolina may have hindered innovation in the high school, but, with the support given Mooresville schools, impediments of this nature could have been circumvented. The department has the ability to step above regional norms and should do so. A remodeling of facilities will have to accompany this effort. The present facilities reflect curricula in vogue twenty years ago.

At present, other nonlaboratory aspects of the science curriculum are being stressed. Interdisciplinary aspects of science touching on such areas as social studies, history, and English are brought out in discussion, although no formal coordination is made.

The limited enrollment of Mooresville will be a problem as new courses are introduced. At present, split preparations for teachers in several subjects are a problem. There are at least two solutions to this problem: integrated science courses could be formed with permission of the State Department of Public Instruction (possibly with Title III, ESEA funds), thus decreasing the need for "part-time" specialists, or enrollment in Mooresville's nine through twelve educational complex could be increased.

Fine Arts, Music

The art facility in the high school is not adequate for a high school art curriculum. Inability to darken the room for art appreciation talks with slides prohibits sophisticated approaches in art instruction. The room is small and not adequately serviced. Storage space is almost nonexistent. As in the rest of the County, art has not been given its proper support in the curriculum. The out-of-doors may be utilized at certain times of the year for art instruction in the school complex, possibly in conjunction with construction and landscaping projects.

Music facilities are exempiary, and the instrumental program begins in seventh grade. String instruction has not been successful because of a small population. With air-conditioned facilities in the Junior-Senior High School complex, summer programs might be instituted with specialists in various aspects of music. Year-round follow-up may be feasible under consolidation.

Other Areas

The staff at Mooresville is interested in significant and economical curricular updating, but this has mainly been left up to the teachers in high school subjects. Some individualized attention is given to students in a few small advanced classes and in extracurricular trips, such as to the University of North Carolina. Speech and dramatics take advantage of excellent stage facilities.

The language department might reevaluate its goals with other language teachers in the County. Fluency in a language might be considered a legitimate goal for some career-oriented students. Longer sequences and elementary school coordination might be desirable.

The possible offering of advanced courses such as calculus or elective sequences such as Japanese or German may depend on course enrollment. Through consolidation there would be an eventual growth of enrollment to make such course offerings economically feasible. Where certain expertise is lacking in one facility, shared teachers could be employed by the County to service full classes in more than one school.

There are communication and cooperation among staffs of the various schools in the Mooresville system. Librarians meet and work toward cooperation. The audiovisual center and central office curriculum coordinator provide services for the Mooresville system. There is a felt need for specialists in various subject matter areas. Such coordination could only be afforded under consolidation.

Library and Other Common Facilities

At present, common facilities appear to be adequate. The library cannot be expanded well, but it has been a demonstration library for North Carolina. Central audiovisual facilities, under the superintendent's office in town, service the needs of the entire Mooresville system in an exemplary manner.

Mooresville Junior High School

The Mooresville Junior High School, entirely air conditioned, is a beautiful and inspiring building for its students. At reduced class sizes (27 pupils, not 30), the capacity at 80 per cent efficiency is 545. Efficiency will not be 100 per cent since not all classes can be full and not all rooms can be utilized every period of the day. Table 25 lists the spaces and capacity.

Table 25
CAPACITY OF MOORESVILLE JUNIOR HIGH SCHOOL

Area	No.	No. of Pupils	Capacity
Classrooms	15	27	405
Language laboratory	1	25	25
Science classrooms	4	24	96
Home economics room	1	20	20
Industrial arts shop	1	20	20
Related classroom	1	20	20
Art room	1	25	25
Music room	1	35	35
Gymtorium	1	35	35
Total theoretical capacity (100%)			681
80 per cent efficiency			545
Approximate membership			640

High School is on left. Junior High is on right. The two schools form a modified educational park.

The school was built in 1968 and is located on 22 acres across South Magnolia Street from the high school property. A large area to the rear of the school is to be the site of a proposed large athletic field or stadium. Land area can easily be expanded to 30 acres with additional contiguous land of rough terrain still available.

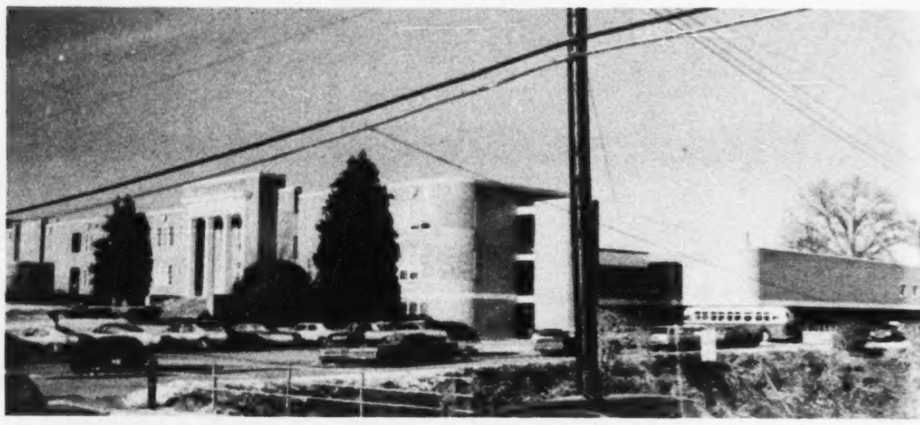
The school has a large student lounge of 3,550 square feet and excellent library facilities. Cafeteria and storage facilities are excellent. The most obvious deficiency in facilities lies in the size of rooms for art and science. These rooms are 780 square feet each; 1,200 square feet each would be desirable. An excellent science program is being conducted, but it could be much better if there were room for individual or small group inquiry. Furniture and services are not experimentally oriented in science and crowded conditions could easily exist in art; lack of space is the major cause for any deficiencies in teaching style. Storage space is at a premium. A movable wall separates two science classrooms, but resulting space if combined might be wasteful. A team taught 50-pupil class might be tried. Other rooms offer no means for expansion.

Because enrollments have been increasing, it is suggested that any additions or remodeling which become necessary involve relocation of science and art facilities. If this is done, storage areas should be arranged to allow locked or controlled access from corridors. English and extracurricular activities might use the darkroom facilities. Art could be relocated in the double science facility near the darkroom also. The art program could be expanded to include crafts not pertinent to Introduction to Vocations or the local industrial arts program. Convenient access to the outside for field trips and weekend work is often an excellent feature for science facilities, but not essential as basic space. Since science fairs have been quite successful at the junior high school, project work space should also be provided.

The industrial arts program has a rather successful modification of the State's Introduction to Vocations. The shop's related classroom is currently being used as a fully scheduled room for another class.

Statesville City Schools

Statesville Senior High School



General Notes

The original section of Statesville Senior High School was completed in 1942. This original plant, consisting of the 1,080-seat auditorium, 17 classrooms, and administrative and guidance suites, was constructed next to what is now the municipal baseball field. The field is lent to the City in return for maintenance and is used by the high school athletic department during school hours and for school games. Adult and municipal groups use the field in off-hours. The stadium occupies more space than is needed for a high school baseball field alone. In 1948 a physical education building, which has been plagued with poor ventilation in the auxiliary facilities but which houses an excellent gymnasium, was added along with the football-track field. In 1953 the music addition was placed on the auditorium. To keep pace with added enrollment, expanded curriculum offerings, and new methods of instruction, science spaces, home economics rooms, and general classrooms were added in 1959, 1961, and 1965. The cafeteria was constructed in 1962 with an addition in 1965. The site will allow limited expansion of needed parking facilities and the addition of a few tennis courts to the rear of the gymnasium. Removal of the baseball stadium and acquisition of neighboring land will allow expansion, the site now has 30 acres. The total theoretical capacity of the building is about 1,327 pupils, this is adequate for about 1,060 pupils at 80 per cent efficiency. Efficiency is not 100 per cent since rooms may not be occupied every period of the day and classes may not be completely full.

Table 26
CAPACITY OF STATESVILLE SENIOR HIGH SCHOOL
Capacity is based on scheduled spaces and does not include special elective areas, projection room, seminar rooms, etc.

Area	No.	No. of Pupils	Capacity
Classrooms	24	27*	648
Language laboratories	2	25	50
Double classroom	1	50	50
Science classroom-labs	5	24	120
Typing rooms	2	30	60
Business room (also used for typing)	1	25	25
Office practice	1	20	20
Distributive education room	1	25	25
Home economics rooms	2	20	40
Vocational shops and classrooms	2	15	30
Mechanical drawing room	1	24	24
Art room (converted general classroom)	1	20	20
Music rooms	2	35	70
Four-volleyball court gymnasium	1	80	80
Exercise rooms	2	25	50
Reading/speech room	1	15	15
Total theoretical capacity (100%)			1,327
80 per cent utilization			1,062
Approximate present membership			948

* These rooms can hold 30 pupils but modern teaching loads are ranging from 24 to 30 per class. It is expected that accreditation agencies will use 25 as an average class size in the foreseeable future.

Your consultants suggest that engineers from the Division of School Planning, State Department of Public Instruction, and inspectors from the Department of Insurance be requested to investigate the following:

1. The presence of a combustible stairway in one exit of the original building which is two stories high
2. Poor ventilation and deteriorating wall finishes in the basement of the gymnasium
3. Inadequate regulation of heating and air conditioning in parts of the high school additions

Athletic Program

Boys are required to take physical education in the tenth grade. They may elect it in the eleventh and twelfth grades but will be mixed in with tenth graders. Facilities allow basketball, baseball, football, and track to be taught as team sports. The use of poorly ventilated downstairs rooms permits modified low-ceiling activities - tumbling, wrestling, and weight-lifting. Emphasis on competitive team sports, which include golf and tennis, does not usually allow for development of basic skills in carry-over sports. To broaden the opportunity for more instruction in carry-over sports, expansion of the athletic staff and installation of several tennis courts is suggested. At present, bowling instruction is also being offered in nearby commercial facilities at minimal cost.

The girls' physical education program includes one required year with elective years in eleventh and twelfth grade. Here, instruction is decidedly slanted toward carry-over sports, but having only one teacher and limited facilities restricts the offerings and individual attention. Equipment for tumbling is also lacking. Activities include bowling, ping-pong, shuffleboard, volleyball, basketball, weights and tumbling, and outdoor badminton. Although the girls' tennis team is an excellent opportunity for perfecting skills, an offering in basic skills in this sport would help increase competence in a carry-over sport.

The physical education program must not only be concerned with producing good school teams, but should also be aware of its role in preparing future physically-fit adults. The program must be concerned with attitudes as well as basic skills which will aid graduates in keeping healthy and strong. The maintenance of appealing environments in dressing rooms, showers, lockers, and general activity rooms is important. With lack of ventilation the present rooms suffer from moisture damage and create unpleasant associated memories of odor, especially during football season. The maintenance of facilities of high quality is essential if students are to regard the development of the body as being as desirable as development of the mind. Poor locker room facilities occur in junior high facilities also; from the standpoint of the student, this image of uncleanliness is associated with sports for several years. Therefore, the condition of facilities is felt to influence attitudes which are carried into adult life.

While the upper gymnasium is a tribute to dedication to physical fitness, the maintenance of the football and track field is not exemplary. This field could be more economically maintained throughout the year, rather than being subjected to major renovation each year. The County schools have proved that occupational education programs can help maintain grounds while training for profitable occupations. Such a program is very economical.

The nature of skills learned also influences attitudes toward adult maintenance of a fit body. If the vast majority of students do not learn a sport or cultivate an equivalent outdoor hobby, one will probably find a physically unfit adult population. Through school departments and recreation commissions, training for sports such as bowling, swimming, tennis, canoeing, golf, (the carry-over sports) will help create a pool of basic skills necessary for stiumulating healthy leisure-time activities. School team sports do not provide enough students with skills.

Occupational Education

The latest State figures show that 33 per cent of the secondary students in Statesville are taking at least one vocational course. This ranks the school 141st out of what was then 160 units in the State. The distributive education and industrial cooperative training programs account for most students in advanced stages of training. Both these programs are primarily out-of-school activities. Both programs have office space and classrooms, with distributive education having a somewhat specialized but limited facility. The bricklaying and carpentry shops are small and have small related classrooms. The carpentry shop is new and is not fully serviced with electricity; ventilation may be a problem with dust-producing activities.

The business department does not have entirely contiguous rooms at present. With the needed expansion in program, the suitability of these spaces should be constantly appraised. Language offerings may be of advantage to future secretaries. Because of a tight schedule, summer utilization of language laboratories may be necessary. These are not in the newer, air-conditioned section of the building.

The home economics department has suitable facilities for consumer and home management training. Talent exists for some occupational training in needed but presently low-paying areas. Expansion to occupational courses should be done in mainly separate facilities. Proximity to drafting areas may allow introduction of an interior decorating segment in home economics. More support is obviously needed for occupational programs that allow in-depth study in such areas as the restaurant-motel industry, child care, and clothing-tailoring.

The occupational rooms, except home economics and drafting, are located in old sections of the building. When trying to raise the image of these programs, relocation may be advisable.

Science Department

There is opportunity for project work in science at advanced levels in this department, but the facilities are not "polished" and provide cramped work space which is taxed to maximum utilization at present. Funds could be used to finish installation and some remodeling, including increased ventilation. The area has poorly ventilated storage rooms and no hot water. The science department is not exceptionally outfitted when compared to national standards but does include some laboratory-oriented teachers who improvise and take full advantage of its special facilities.

Fine Arts, Music

The music program has adequate facilities and a high esprit de corps at Statesville High School. The school system program is supporting a high quality band which is splendidly outfitted. General instruction is given in music through sixth grade. The junior high school program is a weak link in the music curriculum; it primarily centers around singing. The high school program has a band and glee club but offers little in music appreciation. An itinerant string teacher for the County might be provided for those who wish to continue instruction started in other systems and possibly for those wishing instruction in elementary schools. In summary, Statesville has gone far in the areas it has chosen for music instruction; a City of this size and in this region might tend to think of broadening its program. Both Mooresville and the County schools have high quality music programs which could cooperate in broadening appreciation of the "finer things in life" for all students in the County. Statesville, because of its population and central location, might be a central point of coordination.

In fine arts, including graphics and visual communication, photography, etc., the facilities reflect the lack of support for art teachers in this region. Statesville's art room has no sinks and was a general classroom. Journalism enterprise within the school has no formal photography unit of instruction. Facilities for commercial art are nonexistent unless new rooms near drafting could be used. Lack of natural lighting may alter color rendition in newer rooms if used for art. Consolidation may allow common problems in the art curriculum to be solved with adequate sharing of talent among all units. It is hard to keep talent at present salary levels and with no supervisory challenges, even at low pay, available. (A recent shift in staff at Mooresville is a case in point.)

Other Areas

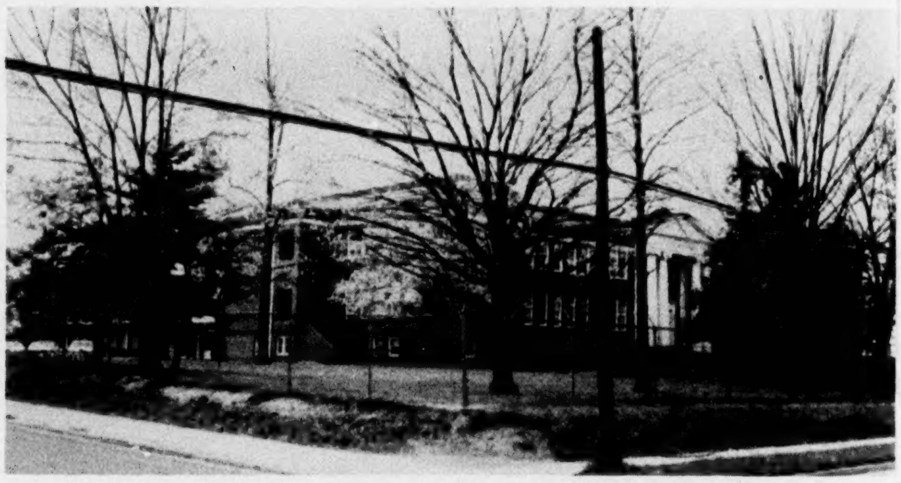
The school is doing an admirable job in academic areas. The staff will work toward improvements as they see fit. An exemplary library assists the staff's needs. This has been a demonstration library for the State.

If room for improvement exists, it lies mainly in programs for youngsters not interested in college. System-wide coordination efforts are needed and have already been begun in mathematics. Earlier instruction in languages and course offerings in languages should be reconsidered. It is essential to look at the use to which students will put their knowledge of language and then to evaluate the programs offered on that basis. For instance, if fluency in Spanish is desirable for health and welfare workers, as well as in business, the program should allow a long sequence. The needs of the textile industry may look to joint language-occupation programs in such offerings as Japanese. Consolidation might permit the use of itinerant teachers or voluntary enrollment in the school offering the course.

The library's cluster of wet carrels, typing and seminar rooms, and generally exemplary facilities are an asset of the high school. Administration of the library is handled so as not to isolate this facility from the general curriculum. The calibre of libraries throughout Iredell County is outstanding. Mooresville and Statesville have been demonstration libraries. Pooling of talent in areas of audiovisual coordination could help some schools, Mooresville has maintained its ESEA Title III center in this way.

The cafeteria has been expanded and is working well for the school now. A student lounge building is also being outfitted and seems adequate.

D. Matt Thompson Junior High School



The older of the two junior high school buildings, D. Matt Thompson was constructed in 1922. In 1963 physical education facilities, a band room, and offices were added. In 1964 library and science laboratory facilities were updated. The site is small and offers inadequate play area and parking on its six acres. Expansion of the site to the west has been recommended in the past.*

The capacity of the building at 80 per cent efficiency (allowing for partially filled classes and rooms not being used every period of the day) is about 485. Table 27 summarizes the capacity calculation.

Table 27
CAPACITY OF D. MATT THOMPSON JUNIOR HIGH SCHOOL

Area	No.	No. of Pupils	Capacity
Classrooms	14	27	378
Special classroom	1	20	20
Science classroom-labs	3	24	72
Home economics room	1	20	20
Industrial arts shop	1	20	20
Mechanical drawing room	1	24	24
Music room	1	35	35
Gymnasium	1	35	35
Total theoretical capacity (100%)			604
80 per cent utilization			483
Approximate present membership			583

---

* Traffic and Planning Associates, Land Development Plan: Statesville, North Carolina. Hickory, N.C., 1968, p. 11.

This school was formerly the old high school. Science facilities have insufficient plumbing service and do not have a darkroom which is often useful in this hobby-oriented age of the student. Desks are flat top and individual, a limiting type of furniture when laboratory-oriented science is being considered.

Introduction to Vocations is given in a school where the shop is mainly hobby and craft oriented. The result is that this ninth grade occupational course is theory- and field-trip-oriented. Improved shop facilities could allow this course to be more active and to build more than a vicarious awareness of vocational opportunities.

The band room has limited storage; there is no art room or art program. The guidance area is pleasant, with one office.

Gymnasium facilities are good with two cross courts allowing possible division. Moisture has damaged the walls of the boys' locker room, and the varsity room is poorly ventilated. (Locker room facilities throughout Statesville seem to be poor.)

Janitorial storage in the building is poor, often not ventilated. Old furniture often occupies needed space.

The cafeteria and dining hall are small, although pleasantly decorated. Noise level is high. A walk-in freezer is needed. Food buying is not centralized.

Miscellaneous comments on this building follow:

1. A large portion is of non-fire-resistant construction. There is no sprinkler or fire detection system. Fire drill performance should be checked.

2. Windows are of a hinged type which impedes blacking out rooms for visual aids and giving proper ventilation.

3. The heating system has been the source of some water damage. The rooms are not thermostatically regulated.

4. Outside stairwells are sometimes slippery with snow.

5. Instructional materials storage is generally lacking; this hinders equipment-oriented curricula and the use of audiovisual materials.

This building is an outdated classroom building. The staff, which is recruited by school and not system, has worked admirably in creating an atmosphere of concern for students. A review of facilities for prospective remodeling might be obtained from the State's Division of School Planning before expanding the site or building any additions. As has been suggested by Traffic Planning Associates, the combining of the junior highs would contribute to more efficient management.

Oakwood Junior High School

This junior high school is located on 9.85 acres with limitations on expansion because of site conditions. However, expansion is not impossible.

The original building was constructed in 1959; five classrooms were added in 1966. In 1969, construction was practically finished on additional classrooms, large group, and specialized areas. The capacity of the building at 80 per cent (for unfilled classes and some rooms not occupied every period) is about 660. This capacity calculation is explained in Table 28.

Table 28
CAPACITY OF OAKWOOD JUNIOR HIGH SCHOOL

Area	No.	No. of Pupils	Capacity
Classrooms	20	27	540
Special classroom	1	20	20
Large group rooms	2	50	100
Science classroom-labs	2	24	48
Reading classroom	1	10	10
Home economics room	1	20	20
Industrial arts shop (with adjunct classroom)	1	20	20
Music room	1	35	35
Gymtorium	1	35	35
Total Theoretical capacity (100%)			828
80 per cent utilization			662
Approximate present membership			648

The overcrowding at D. Matt Thompson suggests redistricting might balance enrollments to a more even utilization of space. This is undoubtedly a problem only because of the recent large addition here. If large group areas are not to be scheduled, they should not be counted when determining capacity.

Science facilities lack services and work space. Storage is limited. The facilities are not the type usually associated with systematic, laboratory-oriented programs. Most activity must be of the demonstration type. No special ventilation has been provided.

The locker room facilities suffer from poor ventilation. The boys' shower facilities are deteriorating from high humidity and condensation behind wall facings. Once again, good health habits are not being cultivated in such poor environments. Physical education suffers in reputation from such facilities. Toilet facilities are also limited.

The cafeteria is well outfitted with walk-in freezer and adequate dry storage. The cafeteria incorporates a teachers' lounge-coffee area.

The industrial arts program must be supplemented with an adequate modification of the State's Introduction to Vocations; this is discussed in the vocational chapter.

The library should be enlarged and work-storage areas increased. The library should serve as a media center. The library was adequate before additions were made. No space has been added to the library, although capacity of the school has more than doubled.

The school is constructed with judicious economy. Ventilation is by window and openings into corridors. Lockers line narrow corridors.

Special Education in Secondary Schools

Although the County high schools have trailer units for special education students, the other high schools have no special facilities. Special education students are given a non-specialized classroom in Statesville's Oakwood Junior High. The County school students spend half a day with other students in the school, but not generally in vocational programs. The Mooresville distributive education program has successfully involved some mentally retarded students. Statesville also runs a classroom for a broad range of special students of various ages and more severe forms of physical and mental handicaps.

Nationally, more responsibility for vocational preparation of these youngsters is being demanded of high schools. It is felt that normal and special students should learn to adjust to and respect each other, especially in preparation for future work. After considerable thought, your consultants have concluded that, after basic skills have been obtained in comprehensive schools, a centralized training program such as that now being operated at the County Sheltered Workshop is the most realistic for Iredell. The high calibre personnel at the Workshop have shown exceptional ability in dealing with their clients. The State of North Carolina already allows cooperative occupational funding with vocational rehabilitation management. We suggest upgrading the facilities by utilizing Unity School and formation of a joint planning board (between school and vocational rehabilitation) for the development of a standard, coordinated special education diagnostic and instructional program for all

A suggested use for the Unity School is for special education, psychological services, and child care programs.

systems in the County. Such a center at Unity may also have diagnostic facilities for learning problems of a technical nature, involving psychological testing or medical examination and interviews. Not all children coming to the facility for help need be taught at the central facility; some would visit only for diagnostic work. Such a center may also be eligible for federal aid if written up as a project.

Many common problems have been seen throughout the County. A few of these are:

1. Specific subject matter coordination is needed from elementary school through high school. Consolidation might give an excellent pool of talent from which subject specialists could be picked as coordinators. The assignment might rotate with two- or three-year cycles.
2. Air conditioning and ventilation problems plague most schools.
3. Instruction in carry-over sports and the elective junior and senior physical education programs need improvement.
4. Art education lacks appropriate facilities.
5. Business education and science lack necessary facilities and funding to adopt new methods of instruction.

6. Curricular innovation, dissemination, and inservice training are not carried out in effective ways with most teachers and schools. Strong management of school system performance requires a coordinated program of teacher improvement, not a program left up to individual motivation. This requires higher salaries or incremental pay for added time in workshops or for supervision.

7. Teachers are questioning their role and duties. If consolidation should occur, the same standard of expected duties should exist in all high schools. A case in point centers around attendance follow-up duties. For instance, if a science teacher must spend time writing letters or phoning to determine why students are absent, he may feel he has accomplished quite a bit before he even begins to deal with ordering of films, supplies, and laboratory preparation. To work toward better teacher performance, teacher duties must be standardized to a high degree of professional behavior.

   Summer employment and curriculum development tasks should also be dealt with by teacher and administrator planning groups, especially if consolidation makes such ventures feasible.

Except for overcrowding, the County high schools are obviously in better condition than the cities'. Of the cities' high schools, certain aspects need corrective action. Mooresville's high school needs the most extensive work. Statesville contains junior high schools which have design problems, and Mooresville's junior high school needs extra rooms. The present needs of the secondary schools are fairly balanced throughout the County.

IV

SCHOOL BUILDING NEEDS

This chapter brings together some data and considerations regarding the enrollments as projected in Chapter I and the capacities of the school facilities as discussed in Chapters II and III. School building needs for each district as an independent entity and for a consolidated administrative unit are discussed. Also included in this chapter are estimated costs to meet the school building needs.

Enrollments and Capacities - Elementary Schools

Iredell County School District

Chart 6 shows the capacity of the elementary schools in Iredell County and also the projected enrollments. For 1970-71, the capacity is calculated at 8,064 at 28 per classroom. Enrollment in grades one through eight is expected to be 7,292. So, in 1970-71, capacity at the elementary level is adequate to meet enrollment needs. Pressures in certain areas, however, will make some schools inadequate in terms of capacity.

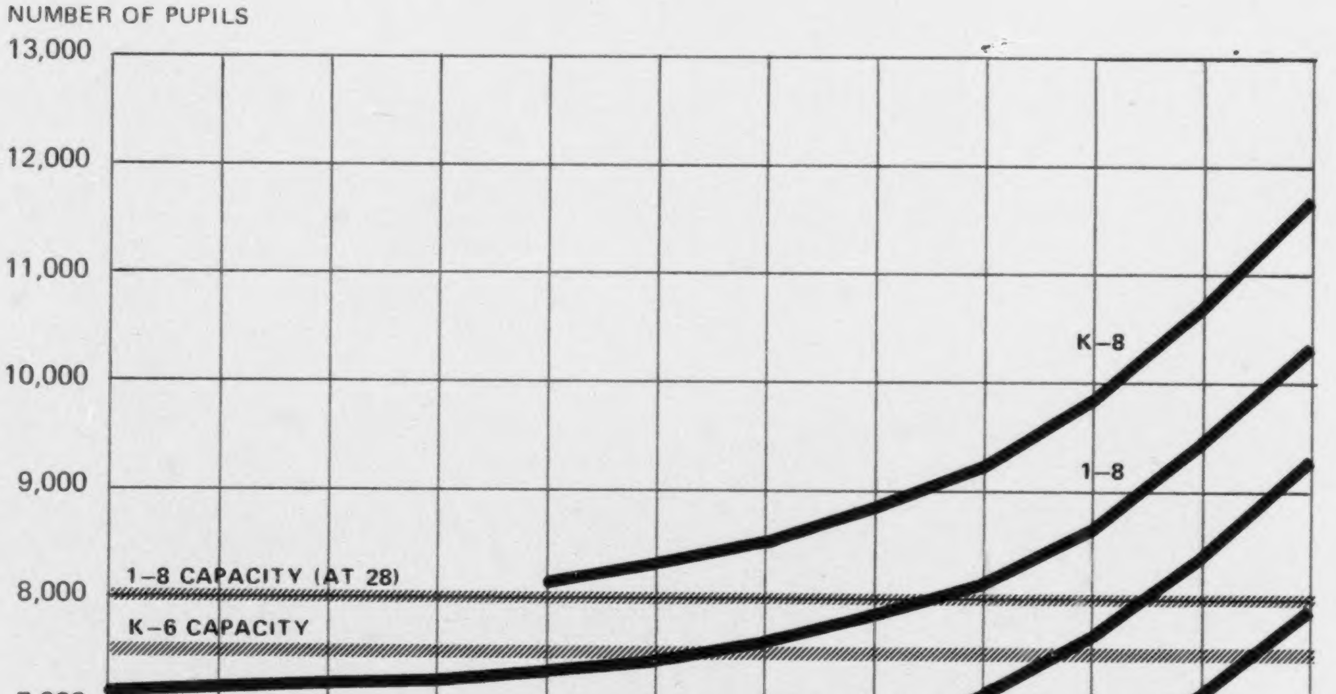
In future years, growing enrollments in grades one through eight will make the schools inadequate in capacity. Adding a kindergarten program as expected by 1973 will aggravate this situation.

The assumption is made that the kindergarten program will be a full-day one for the three districts and spaces needed determined accordingly. If the program is a half-day one, there will be a need for some fewer spaces.

CHART 6

CAPACITIES AND PROJECTED ELEMENTARY ENROLLMENTS

IREDELL COUNTY SCHOOLS



There are two alternatives to meet this situation: build additional elementary facilities or build junior high schools and remove grades seven and eight from the existing schools, thus opening up spaces for pupils in kindergarten through grade six. The consultants favor the latter step since this will allow an improvement in the facilities and the programs for the seventh- and eighth-grade students.

If the elementary schools are used for grades one through six or kindergarten through grade six, then Troutman Junior High School will be subtracted from the capacity, bringing capacity to 7,588. Enrollment in kindergarten through grade six is projected to be 6,533 by 1975-76, well within the capacity figure. Enlargement of spaces for kindergarten, however, will reduce the capacity, as will the closing of any school facilities.

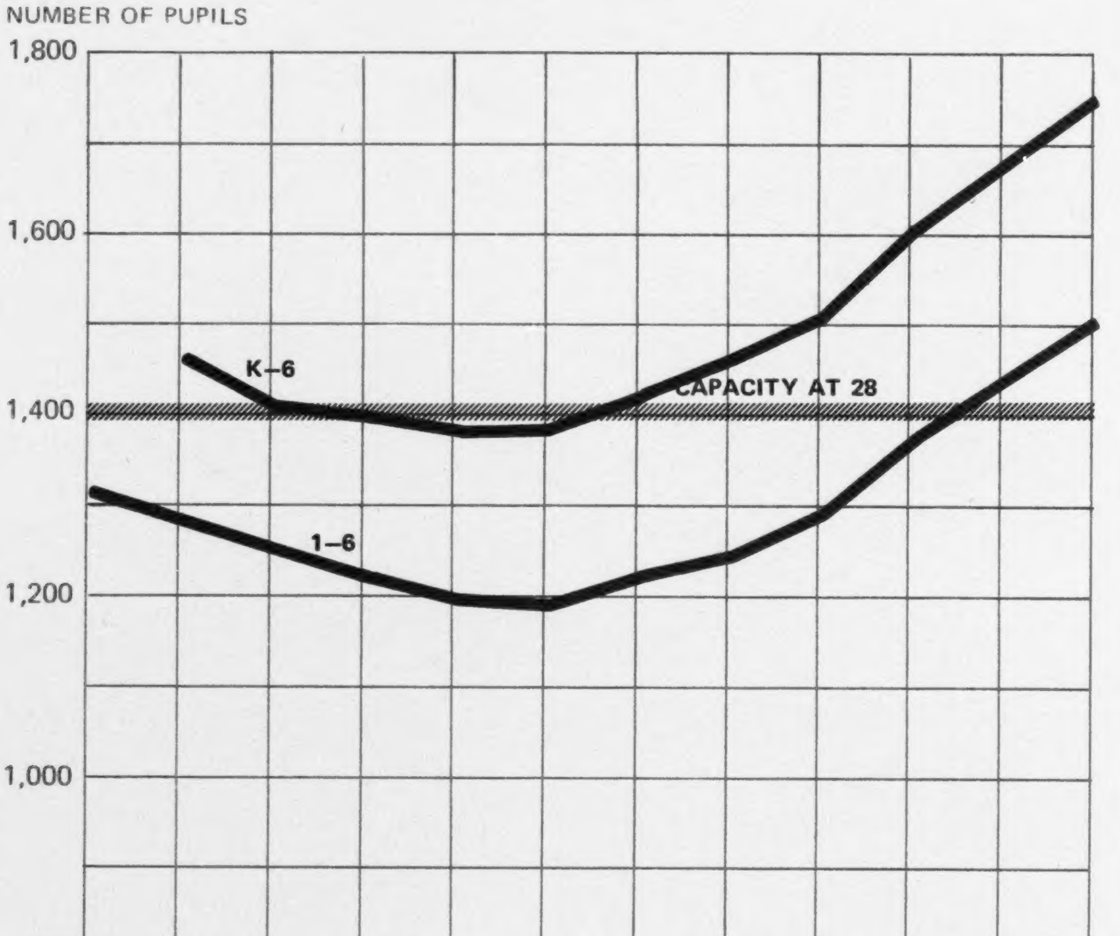
By 1977-78, enrollment in kindergarten through grade six will reach capacity so that by 1975 construction of new elementary schools should begin.

Of course, the phasing out of the original eight-room building at Monticello (8 x 28 = 224), the enlarging of classroom spaces by combining classrooms, the closing of any school like Brawley or Celeste Henkel will reduce capacity in the Iredell schools.

Mooresville School District

Chart 7 shows the capacity of the elementary schools in Mooresville and also the projected enrollments for grades one through six and kindergarten through grade six. Capacity is calculated at 1,400. Enrollment in grades one through six, which was 1,327 in 1969-70, is projected to decrease until 1974, then rise to nearly 1,400 by 1978. So, for these grades, capacity is adequate in the existing facilities. For kindergarten

CHART 7
CAPACITIES AND PROJECTED ELEMENTARY ENROLLMENTS
MOORESVILLE SCHOOLS



through grade six, however, the story is different. When the kindergarten program is added, facilities will be needed, with enrollment in kindergarten through grade six rising almost immediately above capacity. For full-day kindergarten, it will be necessary to add facilities so that seven kindergartens can be accommodated.

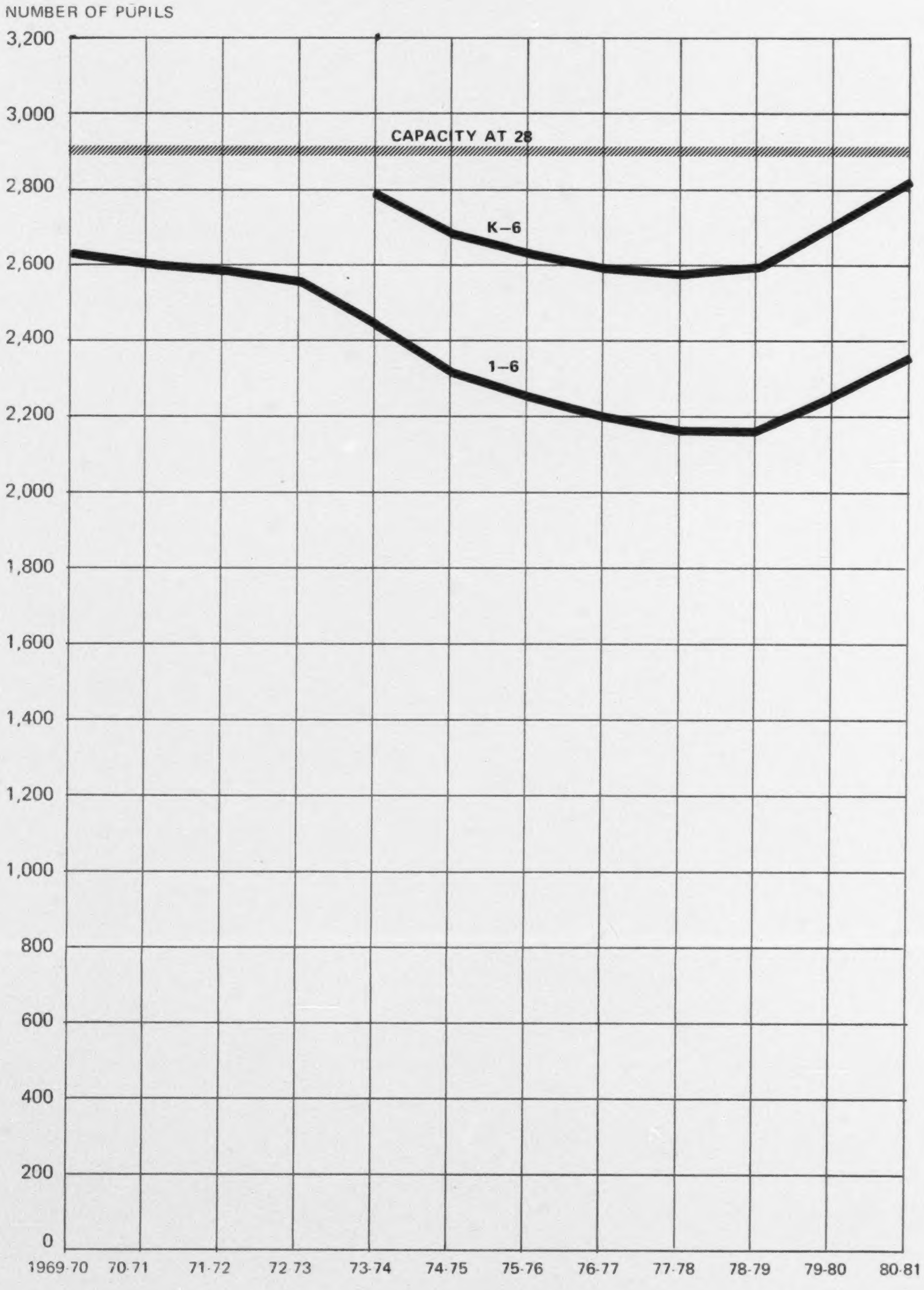
The above analysis assumes that an elementary school will be built to replace the South School and that kindergarten spaces will be built at the time to house the kindergarten program. Spaces can be converted or built at Parkview to accommodate the kindergarten program. In any event, by 1980, capacity will need to be increased to nearly 1,800 for kindergarten through grade six.

Consideration must be given to replacing the original Parkview building and to renovating the original Dunbar building.

Statesville School District

Chart 8 shows the capacity of the elementary schools in Statesville and also the projected enrollments for grades one through six and kindergarten through grade six. Capacity is calculated at 2,900. This includes added classroom capacity now on the drawing board. As the chart clearly shows, capacity is adequate for both grades one through six and kindergarten through grade six in terms of projected enrollments. There is a need, of course, to convert spaces for kindergarten and this may reduce capacity. Consideration should be given to replacing the 17 classrooms at Mulberry.

CHART 8
CAPACITIES AND PROJECTED ELEMENTARY ENROLLMENTS
STATESVILLE SCHOOLS



Enrollments and Capacities - Secondary Schools

Iredell County School District

Chart 9 shows the capacity of the two high schools in Iredell County and the enrollments as projected through 1980-81. Capacity is calculated at 1,983; enrollment in 1969-70 was 2,735. Clearly, the two secondary schools are overcrowded. Enrollments are continuing to grow and facilities will become more and more overcrowded. By 1975-76, enrollment in grades nine through twelve is estimated at 3,393. Immediate attention must be turned to providing additional secondary facilities.

Mooresville School District

Chart 10 shows the capacities of the two secondary schools in Mooresville and the projected enrollments. Mooresville High School will be overcrowded in 1978. This can be solved by careful attention to scheduling.

The junior high school, with a capacity of 545, will have 698 students in 1972 and 724 students in 1975-76. By 1975, an additional 180 students will need seven additional classrooms, expanded central facilities, additional shop facility, and increased guidance and supporting services. The cost of the additional classrooms should involve building larger and better equipped science rooms for the entire school.

Statesville School District

Chart 11 shows the capacities of the secondary schools in Statesville and the projected enrollments. Statesville's Senior High School is adequate in capacity for the next ten years. The junior high schools have a total capacity of 1,145 and will be overcrowded until 1979. In 1974, the enrollment will be about 80 students above the desirable capacity. This overcrowding is not solved by merely adding three classrooms; central facilities (such as a gymnasium and locker room) will be overtaxed. In this case, increased recreational programs may compensate for an overburdened physical education program. Additions to Oakwood and/or renovation of D. Matt Thompson or merger with the County are two alternatives. The temporary nature of the increase favors consolidation which would allow transfer of some pupils.

CHART 9
CAPACITIES AND PROJECTED SECONDARY ENROLLMENTS
IREDELL COUNTY SCHOOLS

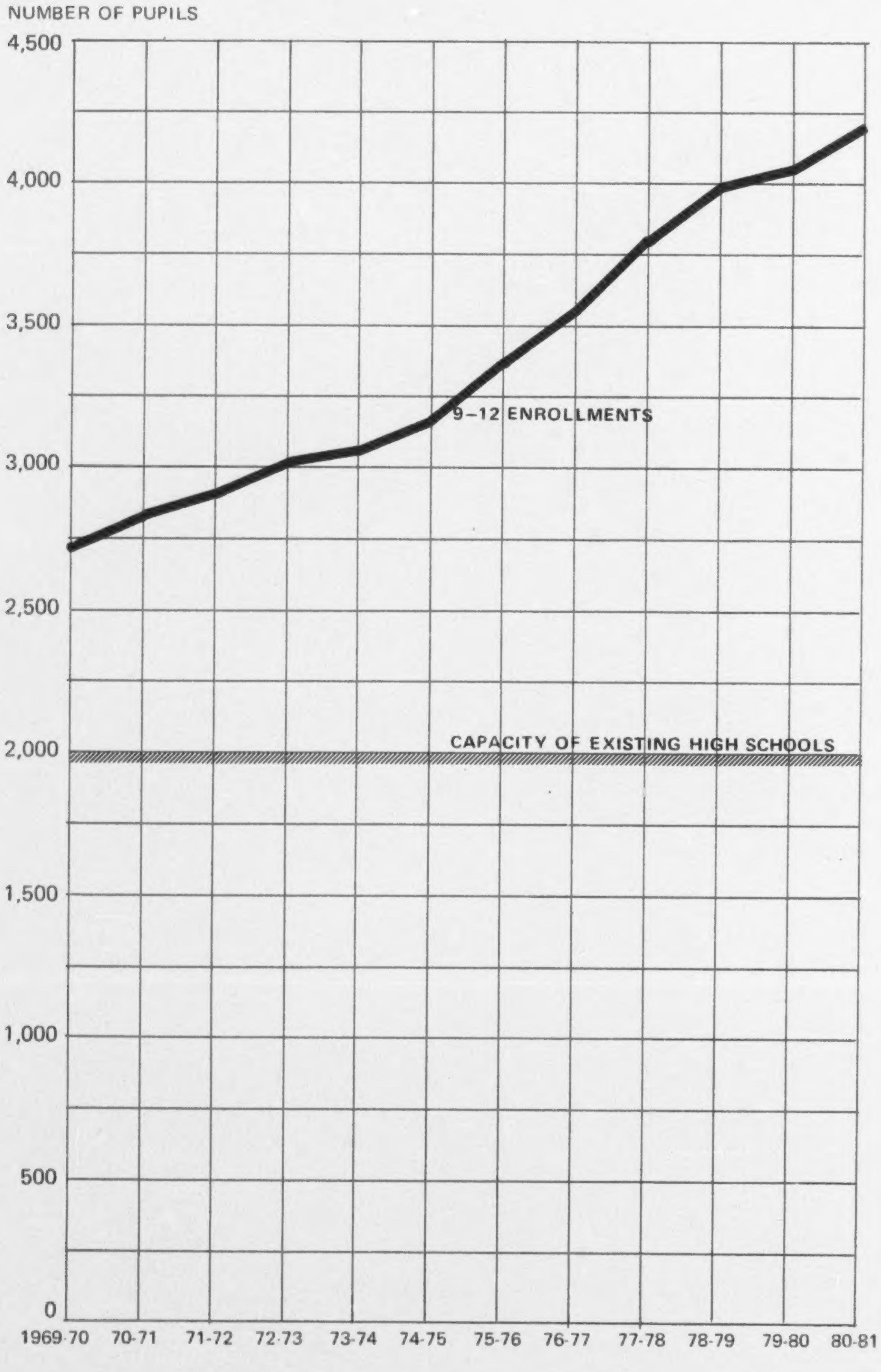
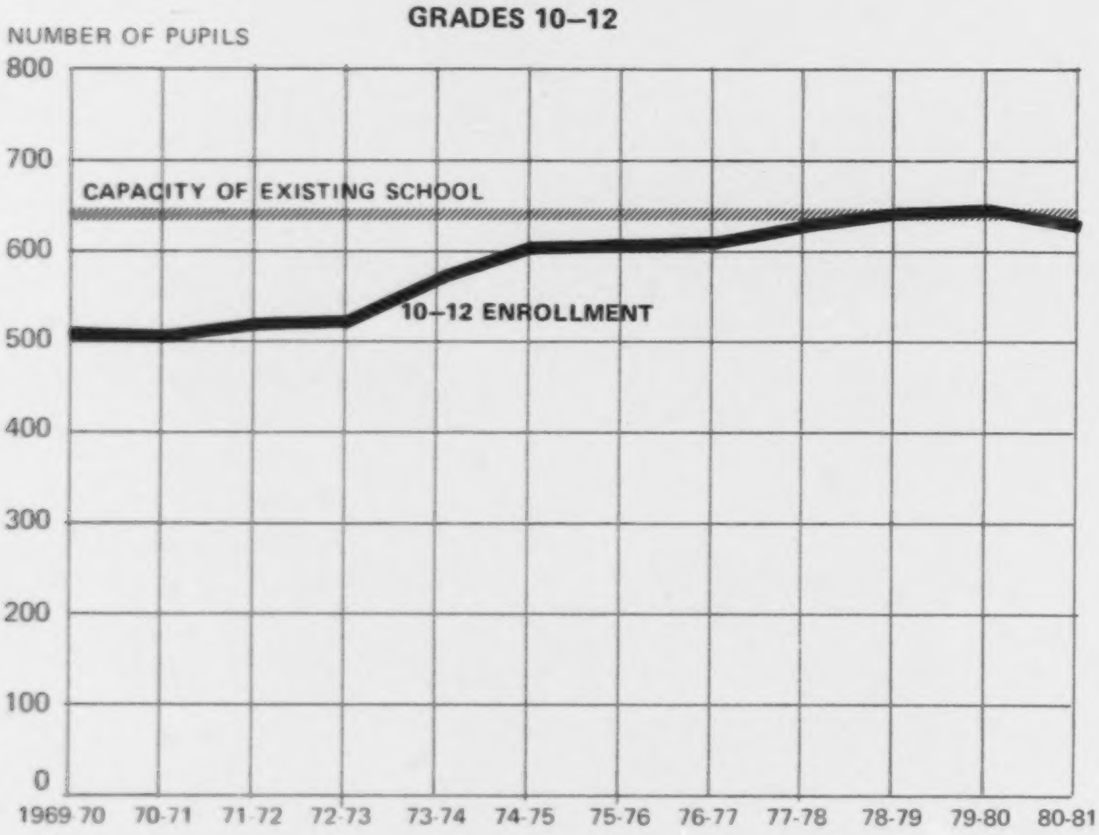


CHART 10
CAPACITIES AND PROJECTED SECONDARY ENROLLMENTS
MOORESVILLE SCHOOLS



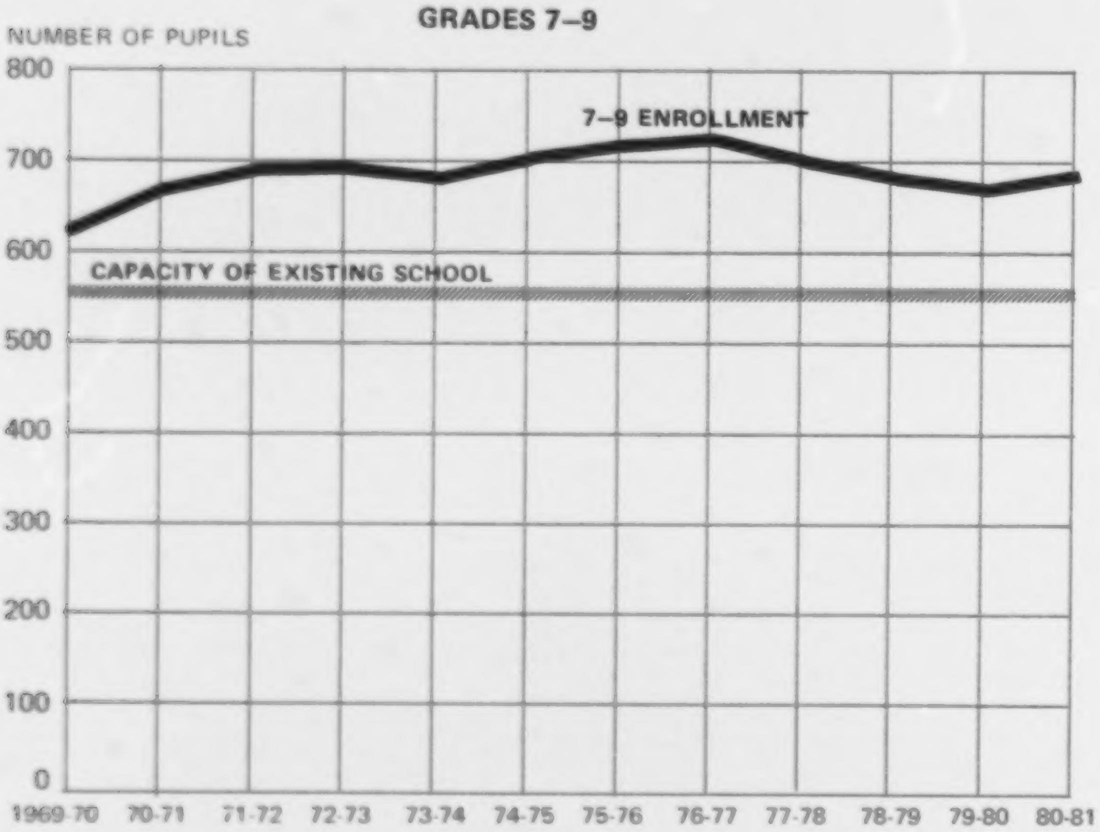
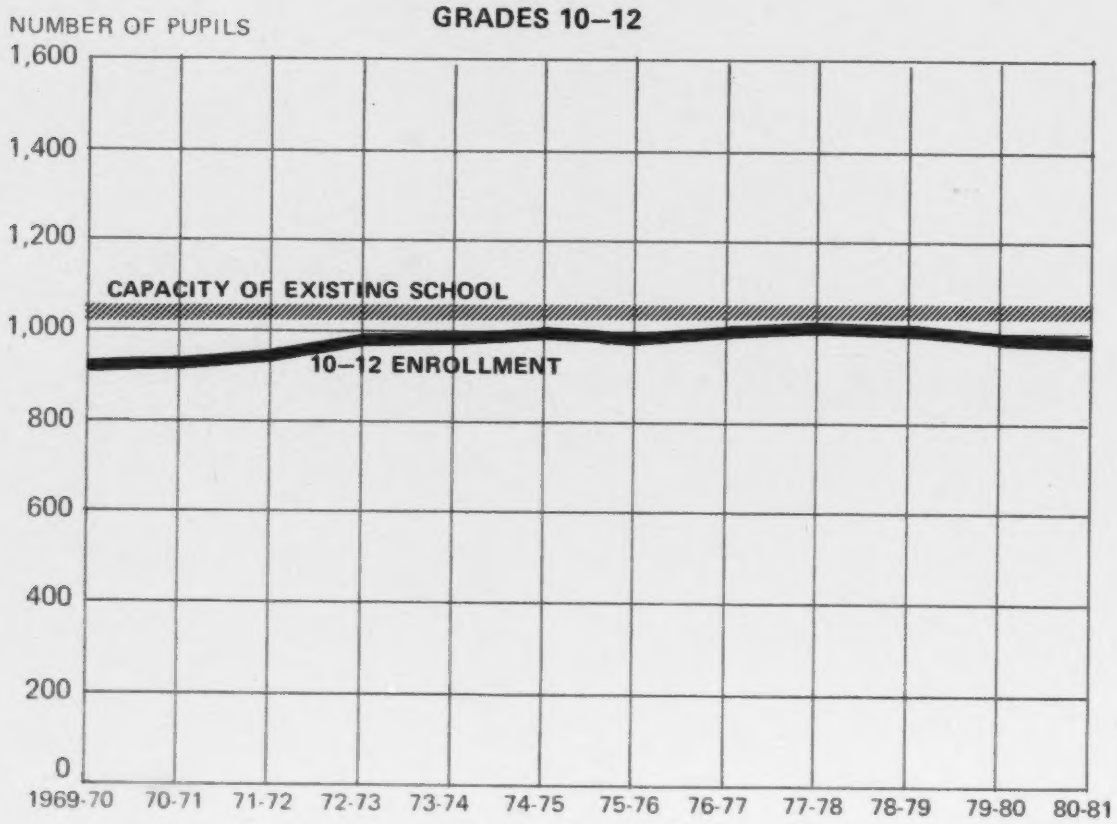
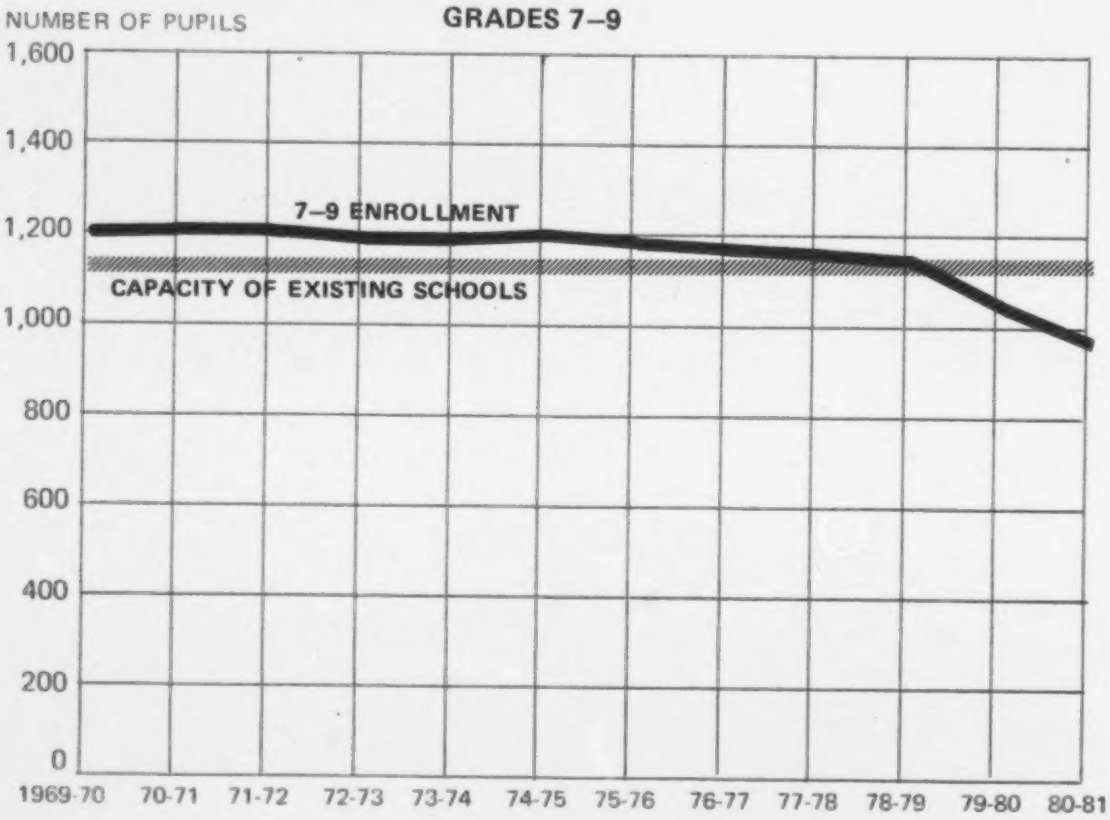


CHART 11
CAPACITIES AND PROJECTED SECONDARY ENROLLMENTS
STATESVILLE SCHOOLS





School Building Needs

Outlined below are the school building needs for each district, as independent administrative units and for the consolidated unit. These needs are based on an analysis of enrollments and enrollment needs and existing school building capacities, as discussed above and in Chapters I, II, and III. In each case, the numbers of children to be housed are taken from the 1975-76 enrollment projections. The consultants also recommend here the school construction to meet these building needs.

Iredell County School District

As an independent district, it is assumed that Iredell County would establish a 1-6 (or K-6), 7-8, 9-12 organization.

A.	Space needed grades 9-12 in 1975-76	3,393 students
	Building capacity	1,983
	Construction needed for	1,410 students

Provide additions to both South and North High Schools totaling 1,400 spaces.

B.	Space needed for grades 7-8 in 1975-76	2,088 students
	Building capacity (Troutman)	420*
	Construction needed for	1,668 students

Expand Troutman by 600 students and build a new junior high school on the east or north side of the County for 1,100 students.

---

*Capacity calculated as junior high school.

C.	Space needed for K-6 in 1975-76	6,533 students
	Building capacity	7,588
		1,055 excess spaces

There will be ample elementary school (K-6) space through 1975-76. This space will be reduced by combining classrooms and using rooms for special purposes. By 1977-78, additional elementary school space will be needed.

Mooresville City School District

It is assumed that Mooresville will retain its existing 6-3-3 school organization.

A.	Space needed grades 10-12 in 1975-76	614 students
	Building capacity	634
		20 excess spaces

No new construction is necessary.

B.	Space needed for grades 7-9 in 1975-76	724 students
	Building capacity	545
	Construction needed for	179 students

Build a 200-student addition to the Mooresville Junior High School.

C.	Space needed for grades 1-6 in 1975-76	1,229 students
	Building capacity	1,400
		171 excess spaces

South Elementary should be replaced as soon as possible.

D. With the addition of 202 kindergarten children, the elementary facilities would be overcrowded by 1975-76 unless South is rebuilt at 500-student size. This will provide enough space for the kindergarten program. Some additional elementary school space will need to be provided by 1980 as well.

Statesville City School District

It is assumed that Statesville will retain its present 6-3-3 grade organization.

A.	Space needed grades 10-12 in 1975-76	1,020 students
	Building capacity	1,062
		42 excess spaces

No construction is needed.

B.	Space needed grades 7-9 in 1975-76	1,212 students
	Building capacity	1,145
	Construction needed for	67 students

No new construction is called for since it appears that enrollments will drop slightly in subsequent years.

C.	Space needed grades 1-6 in 1975-76	2,248 students
	Building capacity	2,900
		652 excess spaces

No new construction is needed.

D. With a projected kindergarten enrollment of 378 in 1975-76, there is ample space to accommodate a kindergarten program. Space should provide no special problems through 1980, although the closing of any facilities or school, Mulberry in particular, could mean new school construction.

The Consolidated Iredell County School District

After careful consideration of the existing school facilities and programs, of school building needs through 1975-76 and up to 1980, of the existing school organization, the consultants recommend that the consolidated unit assume the grade organization of the two cities - a 1-6, 7-9, 10-12 organization. Kindergartens will be added at a later date, by 1973 or 1974 as now foreseen.

The adoption of this organization will relieve the two Iredell County high schools, now four-year high schools.

A.	Space needed grades 10-12 in 1975-76	3,948 students
	Building capacity	3,681
	Construction needed for	267 students

Provide a 300-student addition to Mooresville High School. This will be a distinct advantage, increasing the size of this school, and allowing an expansion of program accordingly.

B.	Space needed grades 7-9 in 1975-76	5,103 students
	Building capacity	2,110
	Construction needed for	2,993 students

Add space for 3,000 students as follows. Provide a 600-student addition to Troutmanand a 600-student addition to Mooresville Junior High; construct two new 900-student junior high schools, one at north site and one in the east side of the County.

C.	Space needed grades K-6 in 1975-76	10,590 students
	Building capacity	11,888
		1,298 excess spaces

There is ample room to house grades K-6 in existing buildings. However, South Elementary in Mooresville should be replaced. Construction of a new building with 450 capacity would be adequate.

D. The kindergarten enrollments will number 1,480 altogether. These children will fit easily into the available capacity of existing elementary schools. By 1980, some additional elementary spaces will be necessary if a kindergarten group is included. The space available would be just adequate for grade-one-through-six projected enrollments by 1980.

However, it must be remembered, as pointed out in the chapters on existing facilities, there are buildings and spaces which will need replacement by the middle and late 1970's, necessitating new construction or renovation.

Estimated Costs of Construction

At this point, the question arises: what are the estimated costs of the needed construction? Costs are estimated for each building project, and then the total costs for construction under the existing independent arrangement and under a consolidated arrangement are compared. Costs are estimated as follows:

High schools - $18 per square foot

Junior high schools - $16 per square foot

Elementary schools - $14 per square foot

Estimated costs include construction, site development, fees, administration, and movable equipment. Cost of site is not included. The estimated costs are based on expected market conditions within the coming year in Iredell County. Taken into consideration is an expected 10 to 12 per cent increase in construction costs.

Iredell County School District

A.	Grades 9-12. Additions for 1,400 students	
	Allow 125 gross square feet per student	175,000 square feet
	At $18 per square foot	$3,150,000
B.	Grades 7-8. New school for 1,100, addition for 600 students	
	Allow 110 gross square feet per student	187,000 square feet
	At $16 per square foot	$2,992,000
C.	Grades K-6. No new construction	
D.	Total - 3,100 new spaces	$6,142,000

Mooresville City School District

A.	Grades 10-12. No new construction	
B.	Grades 7-9. Addition for 200 students	
	Allow 110 square feet per student	22,000 square feet
	At $16 per square foot	$352,000
C.	Grades K-6. Replace South Elementary with 500-student school	
	Allow 90 square feet per student	45,000 square feet
	At $14 per square foot	$630,000
D.	Total - 700 new spaces	$982,000

Statesville City School District

A. Grades 10-12. No new construction

B. Grades 7-9. No new construction

C. Grades K-6. No new construction

D. Totals - No new spaces needed by 1975-76. No new costs.

Consolidated Iredell County School District

A. Grades 10-12. Addition for 300 students

Allow 125 gross square feet per student	37,500 square feet
At $18 per square foot	$675,000

B. Grades 7-9. New schools and additions for 3,000 students

Allow 110 gross square feet per student	330,000 square feet
At $16 per square foot	$5,280,000

C. Grades K-6. Replace South Elementary with 450-pupil school.

Allow 90 square feet per student	40,500 square feet
At $14 per square foot	$567,000

D. Totals - 3,750 new spaces	$6,522,000

It makes good sense to compare the total costs of new facilities built in the independent districts or built in a consolidated unit. The County levies and collects a tax Countywide for new school construction. Certainly, since construction costs are climbing steadily, the most economical plan should be sought. Table 29 compares the total costs.

Table 29
COMPARISON OF SPACES AND COSTS FOR NEW FACILITIES

Grades	Totals for Iredell County, Mooresville, Statesville: Pupil Spaces	Totals for Iredell County, Mooresville, Statesville: Cost	Consolidated: Pupil Spaces	Consolidated: Cost
High School	1,400	$ 3,150,000	300	$ 675,000
Middle School	1,900	3,344,000	3,000	5,280,000
Elementary and Kindergarten	500	630,000	450	567,000
Totals:	3,800	$ 7,124,000*	3,750	$ 6,522,000*

*Note: None of the foregoing cost analysis includes costs of site acquisition

From the foregoing data, it can be seen that the consolidation of schools in Iredell County would result in a small savings in the spaces to be constructed. In addition, more of the construction would occur at the middle school level where costs are somewhat less than for high schools. The savings would be on the order of $600,000.

V

STAFFING THE SCHOOLS

In terms of consolidation, one must assume that all teachers employed by the individual districts would become employees of the consolidated district. As pupil populations become larger,staff needs will continue to expand. Therefore, consolidation represents no threat to teacher jobs.

There is, of course, the question of similarities among staff. Are the staffs generally equal? This question can only be answered in terms of certain objective facts concerning training and experience. The consultants have no way of comparing staffs in more subjective areas. In general, principals and other administrators have appropriate certificates and will not be compared. A comparison of teachers has been made based upon certification status. The distribution of A, B, and graduate (G) certificates is indicative of training, and the number affixed to the certificate is indicative of experience.

Elementary Teachers

In Table 30 which follows, the certification status of elementary teachers is compared. In the County, teachers of grades seven and eight were not included as these people have been listed in the secondary school group.

Table 30
DISTRIBUTION OF ELEMENTARY TEACHERS BY CERTIFICATION MOORESVILLE, STATESVILLE, AND IREDELL COUNTY

Numerical Classification	B			A			G		
	M	S	IC	M	S	IC	M	S	IC
0			17	9	15	15			
1	1		7	2	6	13			
2		1	2	6	2	5			
3			2	2	8	10	1	1	
4			1	1	10	10		2	
5			1	5	7	11			
6			9		6	6		1	
7			1	1	8	5			1
8					5	5	1		
9					1	8	1		
10				1	4	9		2	
11				1	2	1	1	1	
12				13	49	91		1	
13							7	14	

As can be seen in the table, there is a disproportionate number of people with B certificates in the County school district. While this may mean much or little in individual cases, in the total picture it does indicate some shortcomings in professional preparation. Similarly, the County system has a proportionately small share of elementary teachers with graduate certificates. The lower salary scales in the County are, no doubt, responsible for this situation As the relative salaries are brought more into line, it is expected that this difference will diminish with time.

Experience distributions are more or less equivalent among the three districts. The conclusion is that the County system would bring a slightly less well-prepared elementary staff to the consolidated group than would either of the two city districts.

Secondary Teachers

Table 31 shows the distribution of secondary school teachers by school district. The distribution shows sufficient equivalence of staff status that consolidation would pose no problems at this level.

The overall picture may best be seen by the comparisons shown in the State report of July, 1968.* In this report, Statesville ranked 17 in the State in per cent of classroom teachers with graduate certificates, with 20.8 per cent of the staff so classified. Mooresville ranked 21, with 19.1 per cent of the staff with graduate certificates. The County ranked 77 out of all 160 districts, with 12.3 per cent in the graduate category. This was better than the median for all districts, 12.1 per cent.

---

*A Ranking of School Administrative Units, July, 1968, Department of Public Instruction, Raleigh.

Table 31
DISTRIBUTION OF SECONDARY TEACHERS BY CERTIFICATION
MOORESVILLE, STATESVILLE, AND IREDELL COUNTY

Numerical Classification	B			A			G		
	M	S	IC	M	S	IC	M	S	IC
0		1	3	4	7	14			
1				6	5	11		1	
2		1		1	3	3			
3				2	3	5			
4				2	2	6			
5				1	2	7	1		
6				1	2	3	1		1
7				2	2	4			
8				2	1	1	1		
9				1	1	7	1		
10				1	2	2	1		1
11					1	1	3		1
12				12	20	32		1	1
13							6	11	15

Corresponding ranks for professional staff with other than A or G certificates were as follows:

Mooresville	1.8 per cent	Rank 36
Statesville	2.3 per cent	Rank 46
Iredell	8.0 per cent	Rank 125

The median for all districts was 4.55.

The ranking for per cent of classroom teachers with maximum experience for pay purposes was as follows:

Iredell	53.2 per cent	Rank 21
Statesville	48.0 per cent	Rank 60
Mooresville	28.5 per cent	Rank 157

The median for all districts was 46.1 in this category.

The pupil staff ratios in 1967-68 were as follows:

Mooresville	Ratio 22.9	Rank 64
Statesville	Ratio 23.3	Rank 84
Iredell	Ratio 25.5	Rank 151

The median ratio for the State was 23.3.

The overall picture is that the County needs to add teachers in order to match the more favorable staff ratios in Mooresville and Statesville. While the County staff is quite experienced, they need to attract and hold teachers with A and G certificates. Mooresville might benefit by having an addition of more experienced teachers.

VI

ADMINISTRATIVE ORGANIZATION

Central Office Administration

At the present time, the three school systems operate as generally separate entities, each with a board of education, a superintendent, and various supporting personnel. As a result, there is considerable overlap of duties and, in a sense, considerable duplication of effort, although the pupils and school personnel concerned are different in each case.

While there are some disadvantages in a consolidated district, there are also many advantages, particularly in terms of specialization of effort. The task of the school administrator is to define jobs so that a full array of human talents is employed. Organizational relationships should be arranged so that the maximum contribution of specialists may be realized. While utilizing specialists, there must be fine balance between organizational control and independence of action by the employee so that change and innovation are facilitated rather than inhibited.

The central office of a school system represents a point where varied viewpoints may be weighed and decisions reached so that all may move forward together. Certainly judgment and balance are necessary so that this unifying function may be carried out. Expensive, specialized training and close association with the problems to be solved are all implicit in making sound judgments.

With only one superintendent as compared with three at present, additional specialization can be brought to bear upon educational problems. Costs would be generally similar.

In restructuring the central office for a school system of 19,000 students, the following organization is suggested.

Superintendent

The superintendent is the chief executive officer of the schools. He has primary responsibility for coordinating and supervising central administrative services. In addition, he has general control of the school system. He is responsible for long-range planning. He is the professional leader and has responsibility for arbitrating divergent professional viewpoints so that the system may move forward toward the goals and objectives approved by the board of education.

Assistant Superintendent for Instruction

This person is responsible to the superintendent. He has direct control of all principals and all curriculum and instructional activities in the schools. He establishes the general conditions which provide for the inservice growth and development of teachers and other professional staff members. When divergent professional views require resolution, he selects an appropriate course of action. He directs and coordinates the regular school program and staff, the special educational services which are provided for students, and specially funded and/or experimental programs.

Directors of Elementary and Secondary Education

Curriculum progress requires meetings with teachers and principals. Democratic decision-making is a time-consuming process, but necessary. In a school system of the size this will be when consolidated, a director of elementary education and a director of secondary education would be necessary in the immediate future. Special education should be under the direction of elementary and secondary directors. Wherever possible, the education and social interaction of these youngsters should be integrated with those of regular class groups. A separate organizational division is not recommended here.

Curriculum Specialists

At the elementary level some curriculum specialists, particularly necessary in reading, can be used to augment instruction by regular teachers. At least four reading supervisors should be provided by the consolidated schools. In addition, part-time assistance from art, music, science, and physical education leaders should also be provided. This part-time assistance might amount to pay and time equivalent to two full-time positions. Therefore, elementary curriculum assistance would amount to the equivalent of six positions. These specialists would be supervised by the director of elementary education.

At the secondary level, curriculum work would be accomplished with the assistance of principals and department chairmen. No new positions are recommended at the central office level in this division except for the director noted earlier.

The use of specialists from nearby colleges and universities as resource people can reduce the need for other permanent staff additions. This will also give the staff access to the latest research surrounding specific problems.

Written curriculum materials may be developed by staff teams in the summer months. Some extra pay for this type of service would need to be budgeted, depending upon the work to be done.

Considerable attention should be given to opportunities of interdisciplinary approaches to instruction at all levels of school. Avoiding large numbers of subject specialists can help provide flexibility in this regard.

Other Specialists

Modern education calls for a great variety of approaches to instruction including films, charts, slides, transparencies, and the like. Mooresville has moved forward by securing a person to direct the preparation of these materials for use by classroom teachers. In a consolidated system, this function should be continued and expanded. Expanded services may be offered to the total system with the addition of four additional technicians - a total of five.

The Governor's Study Commission* recommends a sharp increase in pupil services throughout the State. On page 78 of that report, a guide to appropriate ratios of staffing is provided. However, the consolidated district of Mooresville, Statesville, and Iredell County will not be in a position to pay the costs of the recommended program unless additional state assistance is forthcoming. Accordingly, more modest suggestions are included here as first steps. At least four speech therapists, four school social workers (including attendance follow-up), one psychologist, and six full-time nurses should be on the staff. It is suggested that one of these people act as part-time coordinator of the activities of this division. As this division expands (depending upon state aid) a full-time coordinator of pupil services may be warranted.

---

*The Report of Governor's Study Commission on the Public School System of North Carolina, Raleigh, N. C., 1968.

Part-Time Supervisors

Elsewhere in this report reference is made to a supervisor of occupational education. This person could be the principal of the area vocational school who serves part time to head up the total program. In addition, the supervisor of adult education and supervisor of summer programs are also expected to be part time at this stage of development. All three of these positions should report through the director of secondary education.

Personnel

A position very urgently needed is that of personnel director. It is commonly recognized that the quality of a school system is directly related to the quality of the teaching personnel. Job satisfaction is an important part of employee morale. Further, the lion's share of money spent on education from all sources goes to pay staff salaries. Personnel management is too significant to be left unsystematized.

A separate personnel division should be formed which would be staffed by a director (and two secretaries). The director should be given responsibility for searching for competent personnel for the system, certificated and classified personnel. Operational decisions and control would remain in the hands of principals, assistant superintendent, and superintendent.

The personnel director would be responsible for coordinating all personnel affairs including transfers, promotions, grievances, substitute services, and the like. He would obviously need to work closely with other members of the administration. He would also work closely with employee organizations.

In addition, some responsibility for coordinating public information programs might fall to this person. The part-time utilization of a good writer under the direction of this person might also prove necessary. Public information as used here includes the preparation and publication of materials explaining board policies and decisions, budget formulation, staff handbooks, and selected press, radio, and television coverage. Generally, efforts would relate to items of systemwide interest.

Since personnel work should remain close to the superintendent, it is recommended that the personnel director be a staff position reporting directly to the superintendent.

Job Descriptions

Job descriptions of several key positions follow.

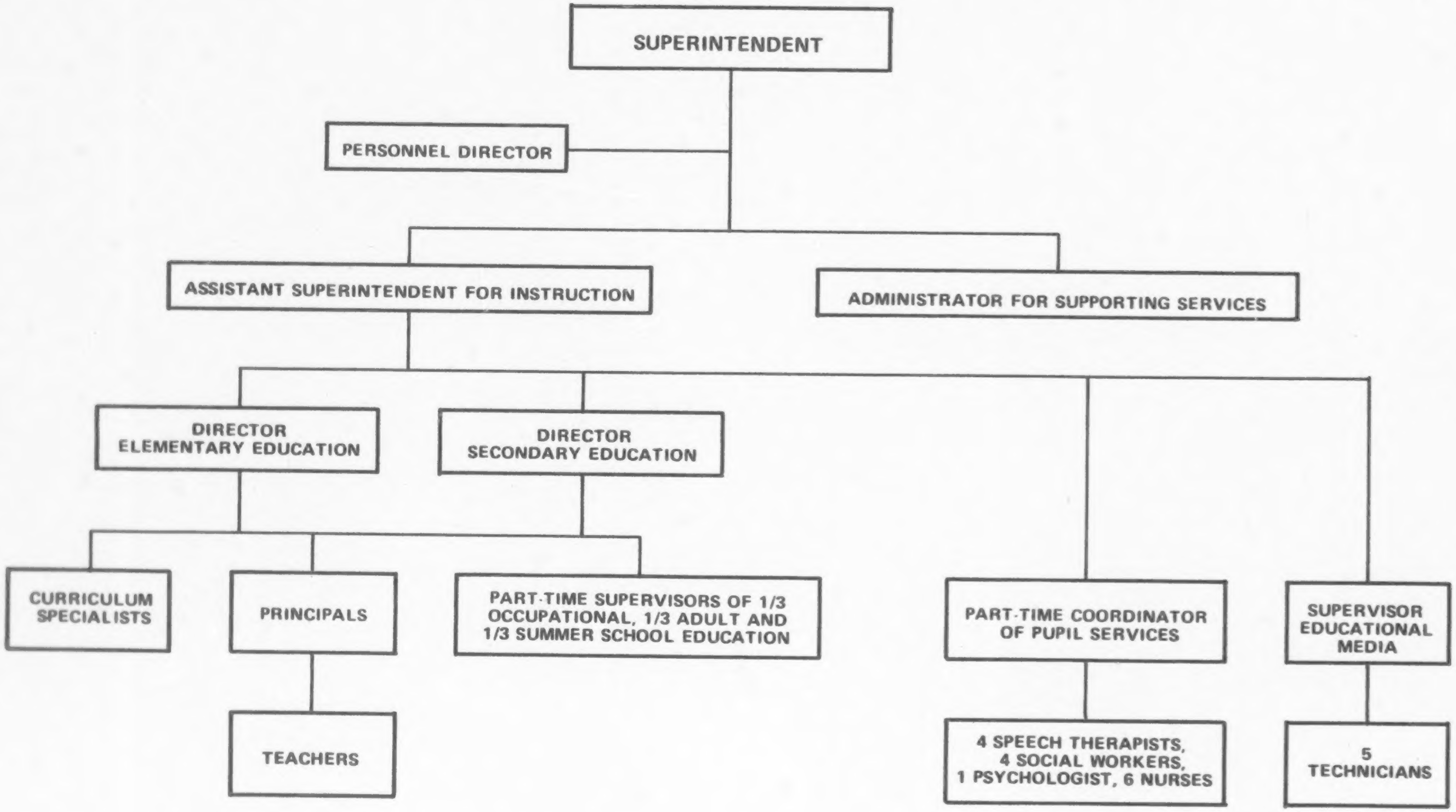

SUPERINTENDENT
PERSONNEL DIRECTOR
ASSISTANT SUPERINTENDENT FOR INSTRUCTION
ADMINISTRATOR FOR SUPPORTING SERVICES
DIRECTOR ELEMENTARY EDUCATION
DIRECTOR SECONDARY EDUCATION
CURRICULUM SPECIALISTS
PRINCIPALS
TEACHERS
PART-TIME SUPERVISORS OF 1/3 OCCUPATIONAL, 1/3 ADULT AND 1/3 SUMMER SCHOOL EDUCATION
PART-TIME COORDINATOR OF PUPIL SERVICES
4 SPEECH THERAPISTS, 4 SOCIAL WORKERS, 1 PSYCHOLOGIST, 6 NURSES
SUPERVISOR EDUCATIONAL MEDIA
5 TECHNICIANS

CHART 12
SUGGESTED ADMINISTRATIVE ORGANIZATION
CONSOLIDATED SCHOOL DISTRICT

POSITION TITLE

Superintendent of Schools

EDUCATIONAL REQUIREMENTS

A Master's Degree and at least one year of additional training.
A Doctorate is preferred.

EXPERIENCE

At least six years of satisfactory experience in public school teaching and administration, at least three of which were in administration or supervision.

Should be familiar with leadership and coordination at the central office level.

Broad experience with a wide range of school problems is preferred.

Demonstrated ability to work effectively with adult groups and to provide community leadership.

Demonstrated ability to write clearly and concisely.

Demonstrated ability to speak well in front of adult groups.

DUTIES AND RESPONSIBILITIES

The superintendent of schools shall be the chief executive officer of the board of education for the administration of the schools. Coordination and supervision of the central administrative service are primary responsibilities of the superintendent. As chief executive officer of the board, he shall have general control of the school system and be responsible for the efficient administration of the system in all its divisions. The superintendent shall be responsible for coordinating all long-range planning for the school system in all its parts. The superintendent shall also exercise those duties mandated by North Carolina state statutes and those which are specifically designated by policies of the board of education.

The duties of the superintendent of schools are as follows:

1. The superintendent of schools shall be the chief executive officer of the board of education for the administration of the school system.

2. The superintendent shall have direct and immediate supervisory responsibility for the following positions:

    Assistant Superintendent
    Administrator of Supporting Services
    Personnel Director

3. All employees of the school system except those engaged by the board for special service to the board - such as legal counsel, auditors, educational consultants, and architects - shall be responsible to the board through the superintendent.

4. The superintendent shall coordinate and supervise the evaluation of all personnel who are responsible to the board through him. The superintendent may recommend the dismissal, subject to state statutes, of any employee whose evaluation is, in the opinion of the superintendent, unfavorable.

5. All appointments to positions under the supervision of the superintendent shall be on the recommendation of the superintendent subject to the approval of the board. The superintendent may recommend employees for promotions as vacancies occur.

6. Substitute employees may be assigned to duty by the superintendent without action by the board.

7. The superintendent shall be responsible for a systematic orientation program and for inservice training of personnel subject to the limitations of the budget.

8. The superintendent may transfer personnel from one assignment to another without board approval if no change in rank is involved, but he shall report such transfers to the board. Changes in teaching assignment within the same building (i.e., from fourth grade to third grade) need not be reported.

9. The superintendent shall attend and may participate in all public and conference meetings of the board unless specifically excused by the chairman or acting chairman of the board.

10. At regular public meetings of the board, the superintendent shall present those items which he wishes to bring to the attention of the board in official session.

11. The adoption of courses of study, textbooks, purchase of equipment and supplies shall be made upon the recommendation of the superintendent subject to the approval of the board.

12. The superintendent shall assemble budget data each year for the consideration of the board. These data shall be presented to the board before the budget is adopted. It shall be the superintendent's special responsibility to present to the board the needs of the system for the ensuing year.

13. The superintendent may, at any time, give out information which is a matter of public record, state his interpretation of board policies, and present his personal views on issues affecting the schools. He will be expected to exercise leadership in general throughout the community in promoting the school program, short of making commitments which presume official action by the board.

14. The superintendent shall supervise and be responsible for maintenance and safekeeping of adequate records for the school system, including financial accounts, business and property records, personnel, school population, and such other records as may be deemed necessary.

15. The superintendent shall keep abreast of new trends and problems in the field of education through participation in the affairs of local, state, and national professional organizations and through visits to other school systems.

16. The superintendent may hold such meetings of teachers and other board employees as he deems necessary.

17. In case of inclement weather or other emergency, the superintendent may dismiss, shorten, or cancel the school session. Whenever any such action is taken, the individual members of the board shall be notified forthwith.

18. The superintendent, with permission of the chairman or acting chairman of the board, may suspend a teacher or other employee from duty when serious misconduct is charged. Any such action requires formal ratification by the board at its next public meeting.

19. The superintendent, upon recommendation by the school principal and in compliance with state law, may suspend a pupil from school for bad habits or conduct.

20. The superintendent may authorize the use of school buildings or portions thereof or school properties or portions thereof to groups or organizations within the limitations of board policy governing such use.

POSITION TITLE

Assistant Superintendent

EDUCATIONAL REQUIREMENTS

Master's Degree plus one year of additional training.
A Doctorate is preferred.

EXPERIENCE

At least five years of satisfactory experience in public school teaching and administration, at least three of which should be in administration or supervision.

Demonstrated ability to work effectively with adult groups and with professionals.

Demonstrated ability to write clearly and concisely.

Demonstrated ability to speak well in front of adult groups.

DUTIES AND RESPONSIBILITIES

The assistant superintendent is directly responsible to the superintendent of schools. He shall act in place of the superintendent of schools in the event of illness or absence of the superintendent. He has the following responsibilities and the authority commensurate to execute them effectively:

1. Direct and immediate supervisory responsibility for the coordinator of pupil services, the elementary and secondary directors, the supervisor of educational media, and all school principals.

2. Supervision and coordination of all aspects of the instructional program and those services which contribute to its successful operation. He has line authority over the instructional program in his relationship with the principals.

Specific responsibilities include:

a. Maintenance of a continuous program for the cooperative study and improvement of the instructional program.

b. Maintenance of a varied and continuous program for the induction and inservice education of teachers.

c. The initial orientation program for personnel new to the school system.

d. Supervision of requests for supplies and equipment connected with the instructional program (but not the actual placing of such orders).

e. Supervision and coordination of the instructional directors, supervisors, and specialists in their work with principals, teachers, and pupils.

f. Aid in selecting all personnel directly concerned with instruction, including supervisors, specialists, principals, assistant principals, department chairmen, and teachers.

3. Regular evaluation of the instructional program and reporting on the findings to the superintendent of schools.

   a. Evaluation of the extent to which the board's educational aims and purposes are being realized in the school program.

   b. Reporting annually in writing to the superintendent of schools regarding the successes and limitations of the educational program.

4. Preparation of State Education Department reports as requested.

5. Keeping abreast of the latest curriculum and instructional trends through participation in the activities of local, state, and national professional organizations and through visits to other school systems.

6. Cooperating with the administrator of supporting services and the personnel director so as to coordinate all efforts and improvement of the total school program.

7. Assumption of such duties and other responsibilities as may be assigned him by the superintendent of schools.

POSITION TITLE

Director of Elementary Education

EDUCATIONAL REQUIREMENTS

Master's Degree and one year of additional training

EXPERIENCE

At least five years of satisfactory experience as a teacher, specialist, or administrator in public school situations.

A broad background in curriculum activities, preferably including experience at several grade levels. Some prior experience in curriculum leadership is desirable.

Demonstrated ability to work effectively with other professionals and with adult groups.

DUTIES AND RESPONSIBILITIES

The director of elementary education is directly responsible to the assistant superintendent. The director has the following responsibilities and the authority to execute them effectively.

1. Direct supervisory responsibility for the curriculum specialists.

2. Responsibility and authority for working with specialists, principals, and others to develop the general philosophy and goals of the total school curriculum.

    a. Study new materials and methods.

    b. Observe and report upon innovative programs in Iredell County and other school districts.

    c. Attend appropriate meetings and conferences of state and national organizations.

d. Review evaluative materials, including tests.

e. Work with specialists and principals and others to develop general philosophy and goals of total curriculum within the scope of overall board philosophy.

3. Responsibility and authority for developing a correlated and integrated program of instruction for the elementary schools in all areas of instruction.

   a. Organize and conduct inservice experiences for teachers which cut across subject-oriented lines.

   b. Organize and conduct inservice experiences for teachers who do not have leadership of specialists or coordinators.

   c. Coordinate the efforts of teachers and teacher committees in improving and updating the curriculum for all levels of pupil talent.

   d. Observe teachers and provide an opportunity for mutual discussion of the teaching-learning situation.

   e. Coordinate efforts to develop instruments to evaluate the curriculum end of the learning experiences of pupils.

   f. Coordinate efforts to integrate the various curriculum elements into a comprehensive whole, including the formation of faculty teams.

4. Shared responsibility for the selection of teachers.

   a. Aid in the recruitment process as necessary.

   b. Cooperate with building principals in the selection process.

   c. Advise upon the assignment of teachers as necessary.

   d. Make recommendations to the assistant superintendent for the selection of elementary specialists.

5. Responsibility for evaluating the effectiveness of instruction for the building principals and the assistant superintendent.

6. Assist the assistant superintendent with budget formulation for this division.

7. Interpret the present curriculum and curriculum changes to the community, including school and civic organizations.

8. Perform other duties as directed by the assistant superintendent.

POSITION TITLE

Director of Secondary Education

EDUCATIONAL REQUIREMENTS

Master's Degree and one year of additional training.

EXPERIENCE

At least five years of satisfactory experience as a teacher, specialist, or administrator in public school situations.

A broad background in curriculum activities preferably including experience at several grade levels. Some prior experience in curriculum leadership is desirable.

Demonstrated ability to work effectively with other professionals and with adult groups.

DUTIES AND RESPONSIBILITIES

The director of secondary education is directly responsible to the assistant superintendent. The director has the following responsibilities and the authority to execute them effectively.

1. Direct supervisory responsibility for the supervisors of occupational adult and summer school education.
2. Responsibility and authority for working with supervisors, principals, and others to develop the general philosophy and goals of the total school curriculum.
    a. Study new materials and methods.
    b. Observe and report upon innovative programs in Iredell County and other school districts.
    c. Attend appropriate meetings and conferences of state and national organizations.

   d. Review evaluative materials, including tests.

   e. Work with supervisors, principals, and others to develop general philosophy and goals of total curriculum within the scope of overall board philosophy.

3. Responsibility and authority for developing a correlated and integrated program of instruction for the secondary schools in all areas of instruction.

   a. Organize and conduct inservice experiences for teachers which cut across subject-oriented lines.

   b. Organize and conduct inservice experiences for teachers who do not have leadership of specialists or coordinators.

   c. Coordinate the efforts of teachers and teacher committees in improving and updating the curriculum for all levels of pupil talent.

   d. Observe teachers and provide an opportunity for mutual discussion of the teaching-learning situation.

   e. Coordinate efforts to develop instruments to evaluate the curriculum end of the learning experiences of pupils.

   f. Coordinate efforts to integrate the various curriculum elements into a comprehensive whole, including the formation of faculty teams.

4. Shared responsibility for the selection of teachers.

   a. Aid in the recruitment process as necessary.

   b. Cooperate with building principals in the selection process.

   c. Advise upon the assignment of teachers as necessary.

   d. Make recommendations to the assistant superintendent for the selection of supervisors of occupational adult and summer school education.

5. Responsibility for evaluating the effectiveness of instruction for the building principals and the assistant superintendent.

6. Assist the assistant superintendent with budget formulation for this division.

7. Interpret the present curriculum and curriculum changes to the community, including school and civic organizations.

8. Perform other duties as directed by the assistant superintendent.

POSITION TITLE

Coordinator of Pupil Services

EDUCATIONAL REQUIREMENTS

A Master's Degree plus one year of additional training

EXPERIENCE

At least five years of satisfactory experience as a teacher, specialist, or administrator in public school situations. Broad background in the area of pupil personnel services, preferably including experience at several grade levels.

Demonstrated ability to work effectively with other professionals and with adult groups.

DUTIES AND RESPONSIBILITIES

The coordinator of pupil services is directly responsible to the assistant superintendent. He shall have the following responsibilities and the authority commensurate to execute them effectively.

1. Supervision and coordination of the pupil services program in all its aspects. He has line authority over principals with regard to the schools in which pupils shall be enrolled and, in the case of special education, the enrollment of children requiring such programs. Specific responsibilities include:
    - a. Maintenance of a continuous program for the cooperative study and improvement of the pupil services program.
    - b. Assignment of each pupil to an appropriate school building in accordance with the policies of the board of education.
    - c. Development and refinement of criteria for the assignment of pupils to special education classes in such categories as mentally retarded, educable, emotionally disturbed, physically handicapped, brain injured, impaired vision, hard of hearing, and other similar classifications.

   d. Assignment of pupils to special education classes.

   e. Supervision and coordination of curriculum and instruction in special education classes.

   f. Supervision and evaluation of special education class teachers (in cooperation with the teachers' building principal).

   g. Development of systematic methods and forms for pupil attendance reporting.

   h. Supervision of the reporting of attendance as required by board policies.

   i. Supervision of the central pupil guidance services, including psychological services, testing services, school social workers, teachers, and speech therapists.

   j. Supervision of all health services provided to pupils and to all board employees.

   k. Scheduling of all school nurses.

   l. Supervision and evaluation of the services of all school nurses.

   m. Aid in selecting all personnel associated directly with the pupil services division.

2. Regular evaluation of the pupil services program and reporting of the findings to the assistant superintendent.

   a. Evaluating the extent to which the board's aims and purposes are being realized in the pupil services program.

   b. Reporting annually in writing to the assistant superintendent regarding the success and limitation of the pupil service program.

3. Keeping abreast of the latest curriculum and instructional trends through participation in the activities of local, state, and national professional organizations and through visits to other school systems.

4. Cooperation with the curriculum director and director of personnel so as to coordinate all efforts at improvement of the total school program.

5. Assumption of such other duties and responsibilities as may be assigned him by the assistant superintendent.

POSITION TITLE

Supervisor of Educational Media

EDUCATION

Master's Degree

Extensive training in curriculum materials, particularly audiovisual aids to instruction.

EXPERIENCE

At least three years of satisfactory experience as a classroom teacher.

A broad background in the use of audiovisual materials.

Demonstrated ability to work effectively with teachers and other adult groups.

DUTIES AND RESPONSIBILITIES

The supervisor of educational media is directly responsible for the overall curriculum materials program within the system. His main function is the improvement and enrichment of the curriculum through more effective utilization of all the materials and equipment available.

1. Organizes, manages, and maintains a curriculum materials center which serves all the schools.
2. Administers a systemwide curriculum materials program with the assistance of building coordinators.
3. Aids in preparing the curriculum materials section of the budget.
4. Aids in selecting new equipment and materials to meet the needs of individual schools.
5. Keeps an inventory of equipment and materials.

6. Initiates pilot programs involving listening, television, teaching machines, programmed materials, and overhead projection.

7. Carries on inservice program for teachers and principals through conferences and workshops.

8. Confers with principals and coordinators, individually and collectively, on various aspects of program.

9. Issues bulletins giving information and availability of materials and other curriculum material and supplements.

10. Keeps well informed on newest trends, equipment, and techniques by attending and participating at meetings and regional conferences.

11. Assists in curriculum planning and revision.

12. Produces certain materials such as lantern slides, tape recordings, transparencies, etc.

13. Writes specifications for new equipment.

POSITION TITLE

School Principal

EDUCATION

A Master's Degree and one additional year of training.

EXPERIENCE

At least five years of satisfactory experience as a classroom teacher in a public school situation.

Experience as a curriculum assistant, guidance counselor, or assistant principal preferred.

Experience should be appropriate to grade levels concerned.

Demonstrated ability to work effectively with adult groups.

Demonstrated ability to write clearly and concisely.

Demonstrated ability to speak well in front of adult groups.

DUTIES AND RESPONSIBILITIES

The school principal is directly responsible for the total operation of his school building. He is responsible to the assistant superintendent in instructional areas. He is responsible to the administrator of supporting services in areas which have to do with supplies and equipment, the condition of the physical plant and grounds, transportation, school lunch, and custodial services for his building. The school principal has the following responsibilities and the authority commensurate to execute them effectively:

1. Serve as the administrative head of the school building and, as such, have responsibility for coordination of the total resources of the school and general supervision of all school activities, safety, and welfare.

2. Be responsible for the development of satisfactory conduct among the pupils of his school, taking such action as he deems necessary within the restrictions of state law and policies of the board of education to correct and improve the conduct of all pupils (including formulating, publicizing, and practicing adequate provisions for meeting emergencies such as fire, storm, or other sudden danger).

3. Be responsible for the general evaluation of the effectiveness of all educational activities within his school building.

4. See that adequate school and pupil records are kept and safeguarded.

5. Carry on a program for the continuous improvement of instruction in his school consistent with the philosophy of education approved by the board of education. His leadership in this area should include a cooperative relationship with the assistant superintendent and shall involve participation of the school faculty in planning and conducting a suitable and effective program for all students in his school.

6. Maintain high morale of the staff, and sound human and professional relationships within the school. The principal shall make himself available for consultation with teachers, students, and parents.

7. Assign all professional staff within the school building in accordance with the limits of their certification and competency. These staff members shall be directly responsible to the building principal.

8. Cooperate in scheduling the use of specialists and specialized personnel in the school building, including instructional specialists, pupil personnel workers, classified personnel and the like.

9. Assist higher authorities in the recruitment, selection, assignment, orientation, inservice training, evaluation, transfer, promotion, and dismissal of staff.

10. Assign, direct, and supervise the clerical and custodial staff in the building.

11. Maintain a cooperative relationship with the school lunch manager with regard to the food service program for the school.

12. Maintain a cooperative relationship with the transportation manager with respect to school bus arrangements for the school.

13. Work cooperatively with the assistant superintendent of schools and the administrator of supporting services in the preparation of the budget and in the business operation of the school.

14. Administer and safeguard all funds that may be received or disbursed by the school.

15. Interpret the educational objectives of the school to parents and other citizens of the community and encourage their participation and efforts to improve the school program.

16. Keep abreast of latest trends in education by participating in the activities of local, state, and national professional organizations and encourage other members of the school staff to extend their participation in a similar way.

17. Cooperate with recognized social and law enforcement agencies in such a way that the services of these organizations are directed toward the best interests of the pupil and the school.

18. Maintain an interest in and a concern for the welfare of the total school system.

19. Assume such other duties and responsibilities as may be assigned him by the assistant superintendent.

POSITION TITLE

Personnel Director

EDUCATIONAL REQUIREMENTS

Bachelor's Degree (see Experience).
Master's Degree preferred.
Degrees may be in other than educational fields.

EXPERIENCE

Bachelor's Degree (see Educational Requirements) may be substituted for Master's Degree only when experience has been especially pertinent to school personnel work.

Experience at a leadership level in personnel affairs in business, industry, or public agencies.

Educational experience as a teacher and school administrator highly desirable.

Demonstrated ability to systematize personnel affairs and evidence of having done so elsewhere, or should have worked in such a division.

Experience in negotiations and personnel contracts.

Ability to create a good first impression.

Demonstrated ability to work well with adult groups.

DUTIES AND RESPONSIBILITIES

The personnel director is directly responsible to the superintendent of schools. The director has the following responsibilities and the authority to execute them effectively:

1. Direct supervisory responsibility for employees in the personnel division (full and part time). Direct supervisory responsibility for public information personnel (part time).

2. Coordination of the work of the personnel division with all other divisions of the school system.

3. Supervision and coordination of all aspects of certificated and classified personnel; specific responsibilities include the following:

    a. Recruit and make preliminary screening of candidates for professional and classified positions.

    b. Assume responsibility for initial placement and transfer of staff in cooperation with operating division heads.

    c. Coordinate the systematic supervision of the services of all personnel.

    d. Maintain a continuous program for the cooperative study and improvement of policies and procedures relating to all certificated and classified personnel.

    e. Maintain official records for all personnel; maintain attendance records for certificated staff personnel.

    f. Recruit and maintain employment records of substitute teachers and other substitute personnel. Supervise the employment of day-to-day substitutes.

    g. Assume responsibility for checking state certification status of certified personnel and for advancement on the salary guide through graduate study for all teachers.

    h. Bring qualified personnel to the attention of other administrators for promotion as suitable vacancies occur.

4. Regular evaluation of the personnel situation.

    a. Evaluation of the extent to which the board's personnel policies are successfully administered.

    b. Report annually in writing to the superintendent regarding the personnel situation, including future personnel needs.

5. Preparation of State Education Department reports as required.

6. Serving as a member of the board's negotiating team in all negotiations with employee organizations.

7. Acting as liaison for the school system in all matters affecting interpretation of employee contracts or grievances.

8. Keeping alert to the latest personnel trends through participation in the activities of state and national organizations and through contacts with other school systems.

9. Coordination of all public information activities.

    a. Develop recommendations for long-range public information objectives and policies.

    b. Coordinate the broad public information program of the school system in accordance with board policies and objectives.

    c. Coordinate the creation, development, and publication of brochures, displays, handbooks, and booklets for the school system.

    d. Coordinate the creation, development, and publication of materials to inform the public, present employees, and prospective employees about the system's plans, programs, and objectives.

    e. Take leadership in promoting sound, effective, and timely internal communications among all levels of the administrative and instructional staffs.

    f. Participate, to the degree appropriate, in departmental staff conferences to ensure effective coordination of overall and divisional public information efforts.

    g. Evaluate various techniques for collecting information from and providing information to the public. Recommend means of providing such information as will yield the best results in each circumstance.

10. Cooperation with other administrators so as to improve the total school program.

11. Performance of other duties at the request of the superintendent.

Business Management and Administrative Services

In considering the effects of consolidation upon the administration of the functions of business management and supporting services, it was necessary for the consultants to review briefly general efficiency and operational practices and procedures of each of the school districts involved. These functions are categorized as follows:

- Accounting
- Payroll
- Transportation
- Purchasing
- Food Service Operations
- Buildings and Grounds and Equipment Maintenance
- Long-Range Planning

In general, the consultants do not have reason to present adverse comments on the administration of specific functions in any of the school districts involved. In fact, accounting and payroll activities in all districts appear well controlled and efficiently administered. The County school district transportation department appears exceptionally well administered. Within budgetary limits, maintenance of buildings and grounds is barely adequate, considering the basic condition and age of some facilities. Food service operations are decentralized.

Centralized Business Management and Administrative Services

In spite of fairly adequate administration of business management functions by all districts, it is believed that a much more efficient operation at the same level of expenditure could be obtained by centralized administration of these functions. As the County grows in enrollment, with attendant growth in building facilities, payrolls, and complexities in planning, the need for centralized administration of business management functions will become more evident. In fact, at present, it would be advisable to centralize all maintenance operations of buildings, grounds, and equipment. This would allow increased flexibility of labor and equipment utilization and result in higher maintenance standards. Payroll and accounting functions should be consolidated on a County basis.

The utilization of sophisticated data processing equipment under a central control for all districts would produce a more significant flow of information for better management decisions at the same or less overall cost. There is an apparent lack of a total systems approach to the correlation and dissemination of data for the long-range benefit of the educational community. There is no automated data processing system, as we understand the term, in operation in any district. This statement applies to all areas of the school system operation and this condition can be considered a severe handicap to County administrators in discharging their responsibilities to the taxpayers, the students, and the various instructional staffs. The County maintains a computer center utilizing an IBM System 360 Model 20 computer configuration. The consultants understand that processing time is available at the center and strongly recommend that the school districts avail themselves of this opportunity to advance in the area of computer utilization and technology.

The lack of a formal and definitive long-range program involving projections for facilities, expenditures, sources of income and revenue, and related elements for this entire County is a severe handicap to the orderly progression of education in all of its aspects.

Corrective measures include the restructuring of the business management and administrative services functions of all County schools on a Countywide basis as follows:

Functional Organization - Administrative Services

In the following functional organization chart, it will be noted that the creation of a new administrative job title is recommended; i.e., manager of administrative services. The duties and responsibilities of this person are as follows:

1. To institute, coordinate, and directly administer a long-range planning program involving projections for facilities, staffing - both certified and noncertified, sources of income and revenue, and other elements related to a five-year budget planning program for the County.
2. To generally supervise all accounting activities as listed on the organization chart, including payrolls, audits, and the mechanics of an encumbrance accounting system.
3. To generally administer the following supporting services functions:

   Transportation
   Purchasing
   Food service operation
   Buildings and grounds, equipment maintenance,
   and custodial services

4. To coordinate these activities with the overall needs of education in the County.

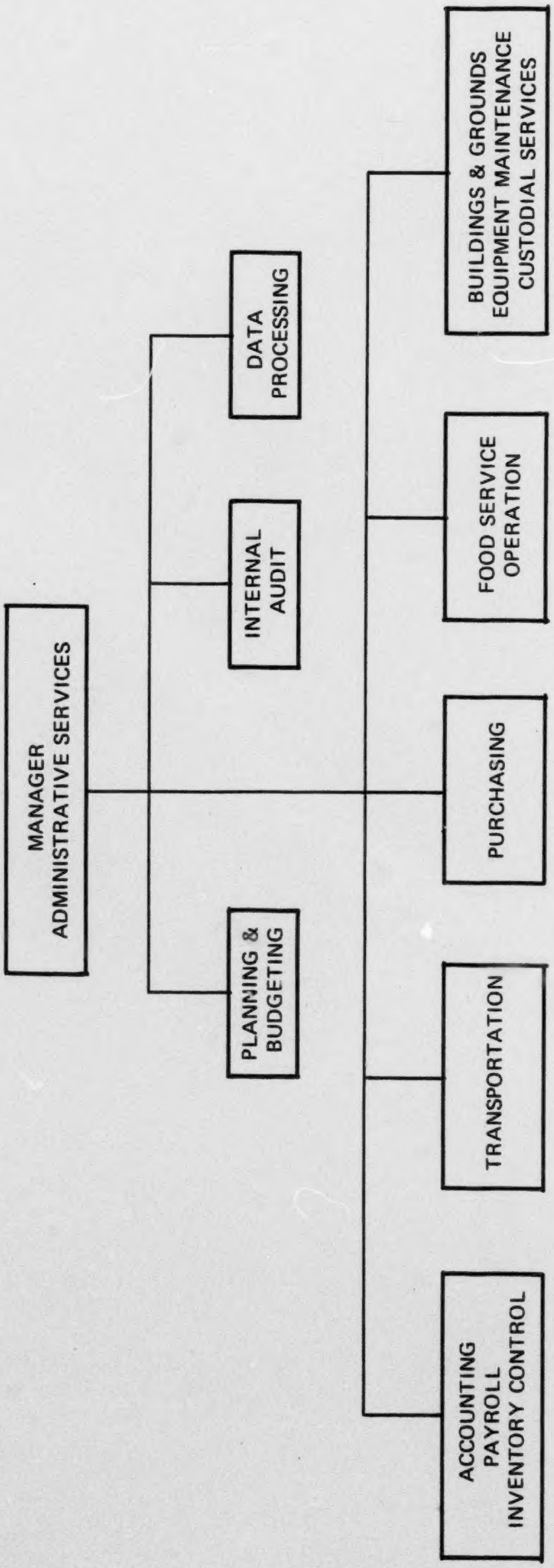

MANAGER
ADMINISTRATIVE SERVICES
PLANNING & BUDGETING
INTERNAL AUDIT
DATA PROCESSING
ACCOUNTING
PAYROLL
INVENTORY CONTROL
TRANSPORTATION
PURCHASING
FOOD SERVICE OPERATION
BUILDINGS & GROUNDS
EQUIPMENT MAINTENANCE
CUSTODIAL SERVICES

CHART 13
FUNCTIONAL ORGANIZATION
ADMINISTRATIVE SERVICES
IREDELL COUNTY SCHOOLS

Primary qualifications for this position are outlined as follows:

1. Heavy experience in budgetary planning and control of a school system.
2. Knowledge of accounting practice gained through direct training and experience in business administration. (Theoretical knowledge of accounting in depth is mandatory.)
3. Knowledge of school system operation gained through direct experience. Personal attributes of selected incumbent should include proven ability to coordinate activities under his direct control with the overall needs of the school system.
4. A personal history of successful coordination and administrative experience.

Within the framework of the proposed administrative services organizational arrangement, it is necessary to create additional supervisory job titles. It will be noted that the groupings of functions listed under the manager for administrative services fall into eight primary categories. This implies the possible employment of supervisory personnel for internal audit budgets and data processing functions, although there may be personnel within the present systems who can qualify for all these supervisory jobs. Some latitude should be left for the proposed manager for administrative services to create and build his staff.

In connection with the assessment of the present administrative business management structure, it appears to the consultants that the control of all accounting activities having to do with food service operation, transportation, and maintenance be incorporated in the general accounting section of the organization chart. It is not sound business practice to continue under the arrangement whereby any operating departments control and execute their own payrolls or accounting activities. It is strongly recommended that an internal audit section be established. Perhaps for the immediate future it would be advisable to retain the services of a local accounting organization to carry forward a continuing audit, if this appears to be economically feasible.

Individual functions under the control of the manager for administrative services are discussed in the following subsections of the report.

Long-Range Planning and Budgeting

A 10-year projection of facilities, staffing, and supporting services as well as expenditures pertaining thereto, together with a projection of sources of revenue should be instituted.

The primary supporting factors, in order of sequence of occurrence, are as follows:

1. Projected Population Growth of the County

   This has been accomplished by the consultants and is presented in another section of the report.

2. Enrollment Projections

   This has been accomplished by the consultants and is presented in another section of this report.

3. Staffing and Supporting Services Requirements in support of enrollment facilities should be projected.

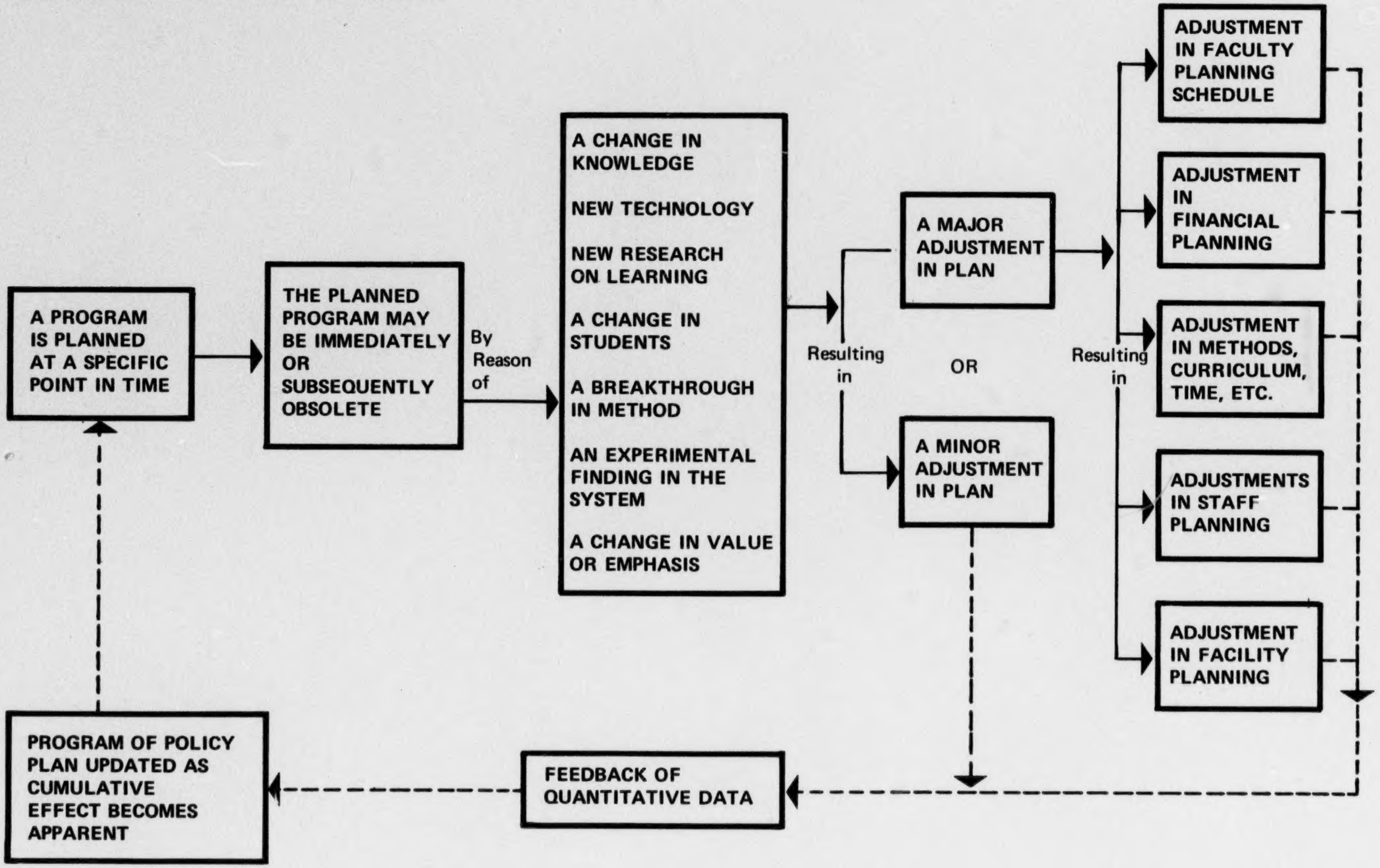
4. Capital Expenditures and Operating Projections

   Upon completion of the above, capital expenditures and operating projections should be developed. Factors to be considered include rising construction costs, possible increase in salary levels both certified and noncertified, and cost of purchased services and supplies.

Inasmuch as planning is a continuing process (see following chart), it will be necessary to assign the planning function as a direct responsibility of the proposed manager for administrative services. His responsibilities in this regard include the co-ordination of the entire planning program. He may delegate specific phases of the effort to selected personnel within the school system.

CHART 14

PLANNING IS A CONTINUOUS PROCESS


A PROGRAM IS PLANNED AT A SPECIFIC POINT IN TIME
THE PLANNED PROGRAM MAY BE IMMEDIATELY OR SUBSEQUENTLY OBSOLETE
By Reason of
A CHANGE IN KNOWLEDGE
NEW TECHNOLOGY
NEW RESEARCH ON LEARNING
A CHANGE IN STUDENTS
A BREAKTHROUGH IN METHOD
AN EXPERIMENTAL FINDING IN THE SYSTEM
A CHANGE IN VALUE OR EMPHASIS
Resulting in
A MAJOR ADJUSTMENT IN PLAN
OR
A MINOR ADJUSTMENT IN PLAN
Resulting in
ADJUSTMENT IN FACULTY PLANNING SCHEDULE
ADJUSTMENT IN FINANCIAL PLANNING
ADJUSTMENT IN METHODS, CURRICULUM, TIME, ETC.
ADJUSTMENTS IN STAFF PLANNING
ADJUSTMENT IN FACILITY PLANNING
FEEDBACK OF QUANTITATIVE DATA
PROGRAM OF POLICY PLAN UPDATED AS CUMULATIVE EFFECT BECOMES APPARENT

Internal Audit

The present accounting systems of the school districts do not now produce an internal audit of transactions and expenditures so necessary to the operation of a school system.

A continuing internal audit program would involve periodic audits of all funds, both receipts and expenditures, in the following areas:

1. Food service receipts and expenditures.
2. All expenditures relating to purchased items of whatever nature, in order to ascertain that goods as ordered have been received.
3. All cash transactions, which should be subject to a periodic audit.
4. Cost distribution to proper accounting control codes, which would be audited at least semiannually.
5. Payroll audit system - should be inaugurated and at least semiannual audits should be extended in this area.

This type of operation would require the employment of a full-time auditor, preferably with experience in public accounting.

Minimum Educational Requirements

A degree in business administration from an accredited business college.

Experience

Auditing experience (two years minimum) with a public auditing organization or large school or county system.

Accounting Practice and Procedures

The present accounting systems of the individual districts are basically well administered insofar as accountability for funds is concerned; records are maintained and data are processed in good order and with a minimum of inaccuracies considering the volumes involved. The system operates on what may be termed a semimechanical basis which does not allow flexibility of analyses and dissemination of data on expenditures and operating costs at frequent intervals in enough detail for complete control and administrative decision.

Payroll accounting is carried forward on a semimechanical basis with generally satisfactory results. It is necessary, however, to inaugurate a completely mechanized payroll preparation system in order to obtain flexibility of distribution of labor costs, with its attendant good effects. It should be recognized that payroll costs for both certified and noncertified personnel are the largest single item of expenditure for the school districts.

The mechanization of the payroll system, together with personnel record-keeping, should be the first order of business insofar as the mechanical approach to the total systems problem in the school district is concerned. Mechanization of payroll preparation must precede mechanization of the general accounting system.

In order for County administrators, the instructional staff, the principals, and other cost center supervisors to be able to operate efficiently, it is necessary that an operational cost control system, fully mechanized, be inaugurated. The type of data to be produced on a monthly basis is as follows.

COMPARATIVE BUDGETED EXPENDITURES TO DATE

Cost Center	Expended To Date	Yearly Budgeted Amount	Over or Under Expenditure	Per Cent Over or Under

COMPARATIVE OPERATING COST TO DATE

Cost Center	Period Costs	Accumulative Costs To Date	Accumulative Costs for Previous Year	Per Cent to Date Over or Under Previous Year

At present, food service accounting is separately administered in some districts. This situation is undesirable from an administrative standpoint and is not sound financial practice. These functions and all other accounting activity that is now carried forward within the school system should be brought under centralized accounting control. There seems to be a lack of standard practice in accounting procedures throughout the system, and one of the first priority items on the agenda of the proposed manager for administrative services would be to inaugurate such a standard format of procedure.

The control of inventory of all items of both capital equipment and expendable items should also be a function of centralized accounting control and be directly administered at a central location.

Maintenance of Buildings, Grounds, and Equipment

In general, the cleanliness and housekeeping in individual schools observed by the consultants varied from very poor to good. Some schools are in need of paint and interior and exterior repair which can be performed only during the vacation periods. The consultants were informed that considerable painting is planned for the coming vacation period.

Equipment maintenance shops were well ordered, and it is the general impression that they are efficiently operated.

The overall objective of a preventive maintenance program is to keep school facilities in such condition that they will meet the requirements of the educational program; i.e., the improvement of instruction. To be more specific, the maintenance program aims to:

1. Promote health and safety
2. Provide operating economies
3. Prevent loss of time
4. Preserve property values
5. Retard deterioration
6. Prevent obsolescence
7. Develop community pride

The proportion of the school budget set aside for maintenance expenditures by other school districts can be determined from several surveys conducted by the United States Department of Health, Education, and Welfare. Three indices were derived from the accumulated data of schools throughout the nation. These indicators or measures of maintenance costs can be employed in the following manner:

1. Operation and maintenance should consume 10 per cent of the school's current operating funds.[1] If 7 per cent is allocated for operation, then 3 per cent remains for maintenance.

---

[1] Regional Field Letter, No. 563, January 20, 1965. U. S. Department of Health, Education, and Welfare, Office of Field Administration, Washington, D. C., U. S. Government Printing Office, p. 4.

2. The percentage of the total cost per pupil in Average Daily Attendance (ADA) spent for maintenance is 3.75 per cent.[2]

3. The school district's annual budget for maintenance should represent from 1 to 2 per cent of the current replacement costs of the school buildings and contents.[3]

If orderly, efficient, economical maintenance programs are to be planned and conducted, the administration must have complete information about facilities and their requirements for upkeep. These programs depend on adequate budgets; hence, pertinent data must be received early enough to allow thorough study and analysis of prospective programs in relation to money available. The supervisor of buildings and grounds should collect and keep adequate records on each school building. On the basis of information thus assembled, officials can plan the program, assign priorities, and schedule the work.

The first step in planning sound, long-range maintenance programs is to collect data on all district-owned school buildings, grounds, and equipment. This can be accomplished by a maintenance survey conducted by the district's supervisor of buildings and grounds.

The survey director and perhaps an assistant, both with wide practical knowledge of school construction, should visit and thoroughly inspect every school building in the district. Other members of the survey team may change from school to school, but for each school the team should include the principal, one or more teachers, and one or more lay citizens representing the community in which the school is located. Lay citizens who have some knowledge of building construction can contribute more significantly to the team's efforts than those lacking such knowledge. Board members, at their discretion, may wish to join the team from time to time.

---

[2] Biennial Survey of Education in the United States, 1956-58. U. S. Government Printing Office, Washington, D. C., 1961, p. 72.

[3] Organizing the Maintenance Program. Bulletin 1960, No. 15. U. S. Government Printing Office, Washington, D. C.

Survey techniques may vary from district to district, but experience has shown that satisfactory results can be achieved only if the team uses a carefully planned checklist. This document lists items to be checked and provides space for comments, observations, and estimated costs of each needed repair. School officials may wish to develop a checklist of their own. For convenience, the list may be divided into three parts: one for buildings, one for grounds, and one for equipment. The building checklist may start with the roof and end with the footing.

Although the building maintenance survey can be conducted at any time, the summer months, when school is not in session, may be most practical from the standpoint both of administration and of unhampered working conditions for the survey team. When all school buildings of the district have been checked, necessary data on maintenance needs can be tabulated, analyzed, and reported to the administration.

Trained people may be required when special inspections are considered necessary: architects and structural engineers if structural safety is to be checked; boiler inspectors if boiler problems are involved; and safety engineers, often assisted by fire chiefs and insurance officials, if fire safety is to be determined.

Close surveillance of the school plant by the principal may require the help of all school employees in a position to detect maintenance problems in their earliest stages. Custodians may discover and either correct or report malfunctioning safety controls for boilers and thus prevent possible explosions causing property damage, plant shutdown, and injury to building occupants. Teachers may discover and report damaging moisture infiltration during seasons of heavy precipitation. Lunchroom workers, in daily contact with food preparation and service equipment, may report conditions which they consider hazardous. Similarly, other building personnel (and pupils) can and should inform the principal about maintenance problems that appear to need attention.

Every reported instance of maintenance need should be investigated by the principal or should be referred by him to the head custodian for checking. Some complaints, reports, and observations by building personnel may be of little significance, others of great importance. These procedures will be helpful in preventing additional or prolonged property damage, will save money, will spread maintenance expenditures evenly over the years, and may prevent injury or death.

It is incumbent upon the school officials to publicize the advantages inherent in a long-range, well planned, adequately financed maintenance program. We all are creatures of our environment. Suitable or satisfactory behavior patterns of children and more effective teacher-pupil interaction are the direct results of superior teaching skills, but these same desirable school objectives are also the indirect results of a pleasing, comfortable, and satisfying physical environment.

Business Education and Computer Technology

It became apparent early in the study that none of the school districts in Iredell County was offering instruction in data processing and computer technology at the eleventh- and twelfth-grade level. The administrators of the County school system have, however, instituted an investigation of costs and feasibility of such a program. The consultants are of the opinion that such a program should receive the direct attention of school district administrators and boards of education forthwith. Many school systems throughout the country and in the Carolinas are now well along with comprehensive programs in this area and the positive results are well known. Accordingly, the consultants propose that immediate steps be taken to inaugurate such a program on a Countywide basis without delay.

Individuals of limited intellectual abilities can be taught to operate data processing machines under direct supervision just as they can be taught to operate industrial machines of considerable complexity. These include key punch machines and other peripheral equipment. The school districts have an obligation to provide this type of training for these individuals.

A forward program for the purpose of training instructional personnel should be instituted. Selected members of the business education instructional staff of each school district should attend a reputable basic computer school. This service is offered by IBM without cost, other than transportation, if the client has leased or purchased IBM equipment.

Material and course content are available to aid in preparing programs to suit the specific instructional needs of the school districts.

There are three categories of students who would benefit from a vigorous, forward data processing program administered by business education departments as follows:

1. Students of limited intellectual abilities who will terminate their formal education at the completion of grade twelve.

   Some of these students can be taught basic machine operation if they are properly motivated and, as a result, become immediately employable.

2. Students who intend and have the potential to pursue careers in business administration and accounting.

   These students should be offered at least two semesters of data systems, programming, and related techniques for credit. "Hands on" computer experience is desirable.

3. Mathematics and science majors and other gifted students majoring in other disciplines.

   These students should be offered at least two semesters for credit as electives. "Hands on" computer experience or access to terminals is also desirable for this category. These students should have precollege indoctrination in computer technology and symbolic languages such as Fortran, Cobol, etc.

In conclusion, it should be stated that this type of program can be initiated at minimal cost on a phase basis.

VII

FINANCIAL CONSIDERATIONS

This chapter considers some financial considerations and implications of consolidation for the three school districts of Iredell County, Mooresville, and Statesville.

Special State Aid for Consolidation

In North Carolina there is no real financial incentive for consolidation. There is only a kind of save-harmless policy adopted by the State Board of Education, which assures to a merged district for two years state funds for general control equivalent or no less than these units would have received as independent districts.

If the State is serious about consolidation of school districts, it must do much more than it is at present as far as financial incentives are concerned. Districts which stand to lose or remain the same financially resist consolidation.

Other states provide financial incentives. In New York State, for example, school districts reorganizing after July 1, 1965 are eligible to receive additional building expenses aid and additional operating expenses aid.*

1. Incentive Building Expenses Aid - whenever a district reorganizes after July 1, 1965 in accordance with the State Plan as announced or reaffirmed by the Commissioner, and if the reorganization a) completes the State Plan and b) falls into one of the five categories described below, such reorganized district is entitled to additional

---

* Source: Section 3602 of the New York State Education Law.

building expenses aid amounting to 25% of the building expenses aid otherwise payable based on approved expenditures for debt service, or from budgetary appropriations, or from reserve funds for projects in which the general contracts were awarded after reorganization and prior to July 1, 1975, or within five years from the effective date of the reorganization, whichever is later.

To be eligible for this additional aid the reorganization must include at least: two high school districts; or one high school district plus at least nine other districts, or two central school districts; or one high school district plus at least one district with more than eight teachers; or one city school district plus at least seven other districts.

The incentive aid on such projects plus regular building aid may not exceed 95% of the approved expenditures for debt service plus the approved expenditure from budgetary appropriations or from reserve funds which are used to determine the regular building aid for the year in question for such projects.

2. Incentive Operating Aid - whenever two or more districts reorganize after July 1, 1965 and before September 1, 1970, and such reorganization a) completes the State Plan as announced or reaffirmed, and b) falls into one of the five categories described above, the operating expense aid is increased by 10% not to exceed a total of 90% of the approved operating expenses or the $760 per pupil ceiling, whichever is the lesser, for a period of five years beginning with the first year of operation as a reorganized district. Thereafter, the additional aid is determined by reducing the 10% by one per cent for each year, beginning with the sixth year of operation as a reorganized district, and continuing until the additional operating aid is eliminated. For example, in the sixth year of operation 9% is used, in the seventh year 8% is used, etc.

Ability to Support Education

Iredell is by no means a poor County. In 1966 out of 100 counties in the State it ranked fifteenth, with a per capita personal income of $2,420. This figure was well above the median of $1,825. Equalized valuation per pupil enrolled is a figure frequently used to assess a district's ability to support education. In 1966-67, Iredell ranked 36th out of the 100 counties, with a valuation of $19,774, well above the median figure of $16,919.*

Table 32 and Chart 15 show the actual assessed valuation from 1965 through 1969 and the assessed valuations from 1970 through 1975 as projected by consultants for the three school districts and the entire County. Projections were made on the basis of the growth in valuations in the districts from 1965 through 1969. The table and chart show a more rapid rate of growth in the County outside the cities than in the cities themselves. This assumes no annexation by the two cities.

Assessed valuations are at 75 per cent of true valuation.

---

* Statistical Services, Department of Public Instruction, North Carolina, Profile of Significant Factors in Education in North Carolina, A Ranking of School Administrative Units, July, 1968.

Table 32

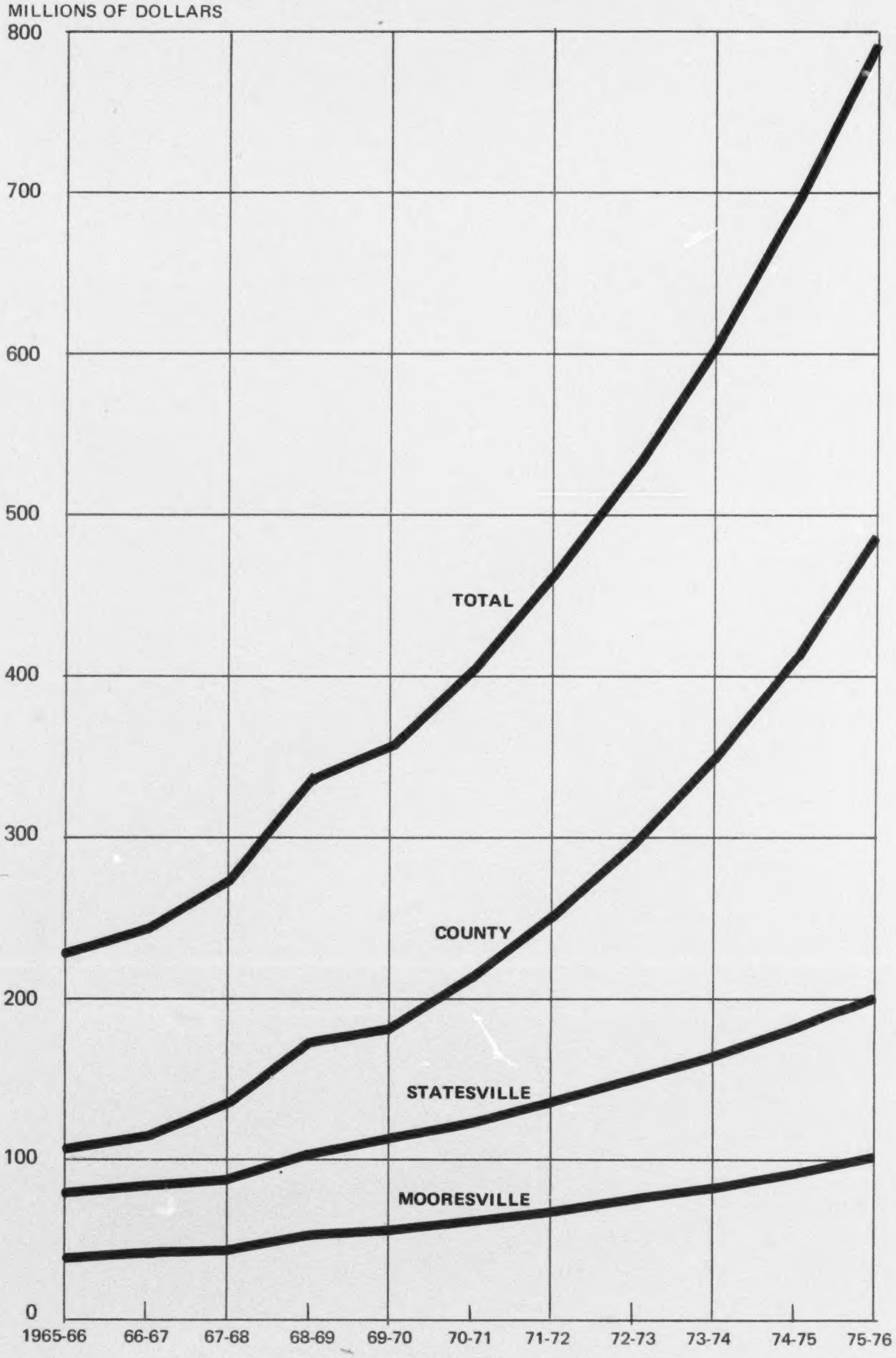
ACTUAL AND PROJECTED ASSESSED VALUATIONS IREDELL COUNTY, MOORESVILLE, AND STATESVILLE

1965-66 through 1975-76

Year	Iredell County	Mooresville	Statesville	Total
1965-66	$108,841,968	$ 40,441,720	$ 81,709,150	$230,992,838
1966-67	116,714,328	43,368,629	86,411,377	246,494,334
1967-68	137,774,662	46,576,892	90,653,143	275,004,697
1968-69	173,930,973	55,069,604	108,464,410	337,464,987
1969-70	185,026,317	57,779,869	114,658,259	357,464,445
1970-71	217,400,000	64,000,000	126,200,000	407,600,000
1971-72	255,500,000	70,800,000	139,000,000	465,300,000
1972-73	300,200,000	78,400,000	153,000,000	531,600,000
1973-74	352,700,000	86,800,000	168,500,000	608,000,000
1974-75	414,500,000	96,000,000	185,500,000	696,000,000
1975-76	487,000,000	106,300,000	204,300,000	797,600,000

It is anticipated that the ratables will continue to grow at a faster rate outside than inside the two cities. These ratables will give more of a tax base for taxation and support of the schools. In 1965 the County school district contained 47.1 per cent of the County's ratables, Mooresville 17.5 per cent and Statesville 35.4 per cent. In 1975 it is expected that the County school district would contain 61.1 per cent of the County's ratables. Mooresville 13.3 per cent and Statesville 25.6 per cent.

CHART 15
ACTUAL AND PROJECTED ASSESSED VALUATIONS
IREDELL COUNTY SCHOOL SYSTEMS, 1965-66–1975-76



Valuations have been rising faster than enrollments in the whole County. Equalized valuation per pupil in 1969-70 was $27,406. This trend is expected to continue through the early 1970's. This measure indicates that Iredell County has and will continue to have ability to support education at a higher level than it has in the past.

Revenue and Current Operating Expenditures

In North Carolina funds for current operating expenditures come mainly from the State. Funds are also provided through local and county units, and there are also federal funds involved. However, it is the State which provides the basic support. In 1967-68 for example, on a statewide basis, of the total funds for current operating expenditures, 69.6 per cent was provided by the State; 14.0 per cent was from federal sources, and 16.4 per cent came from local sources. There is considerable disparity among the various districts, of course. In this same year Iredell County reported that 86.1 per cent of its funds came from the State.*

In the same year the breakdown for Iredell County and the two cities of Mooresville and Statesville was:

Administrative Unit	Per Cent of Total by Source		
	State	Federal	Local
Iredell County	86.1	5.1	8.8
Mooresville	65.8	14.0	20.2
Statesville	72.4	8.4	19.2

---

* Department of Public Instruction, Statistical Services, N. C., Current Expenditures by Source of Funds, 1967-68.

It is immediately apparent that the two cities were supplementing State school funds from local tax sources to a much greater extent than was the County in this year. This is still true in 1969-70.

In 1966-67 the three districts had the following per pupil expenditures of funds raised locally:*

Administrative Unit	Amount Per Pupil	Ranking in 169 units
Iredell County	$31.58	146
Mooresville	$80.16	29
Statesville	$72.31	37

In North Carolina State-allotted professional personnel are paid in accordance with State salary schedules adopted by the State Board of Education. Teachers are paid on the basis of this State schedule from State funds. In order to attract and retain better teachers many local administrative units provide salary supplements for teachers from local tax funds. Some units use local funds to employ additional personnel, beyond those allotted by the State.

Table 33 is the State salary schedule. Table 34 gives the annual supplements by the administrative units in Iredell County, for 1967-68 and for 1969-70.

---

* A Ranking of School Administrative Units, op. cit.

Table 33
STATE NINE MONTHS' SCHOOL FUND
INDEX SALARY SCHEDULE FOR 1970-71
CLASSROOM TEACHERS - 9-1/4 MONTHS' EMPLOYMENT

	Salary		Types of Certificates and Certificate Levels						
Index	Monthly	Annual 9-1/2 Mos.	"G"	"A"	"B"	"C"	Elem "A"	Elem "B"	Non-Standard
1.51	$990	$9,158	13						
1.48	969	8,963	12						
1.45	948	8,769	11						
1.42	927	8,575	10						
1.39	906	8,381	9	12					
1.35	885	8,186	8	11					
1.32	864	7,992	7	10					
1.29	843	7,798	6	9					
1.26	822	7,604	5	8					
1.22	801	7,409	4	7					
1.19	780	7,215	3	6					
1.16	759	7,021	2	5					
1.13	738	6,827	1	4					
1.10	717	6,632	0	3					
1.06	696	6,438		2					
1.03	675	6,244		1	6				
1.00	654	6,050		0	5				
.97	633	5,855			4				
.94	612	5,661			3				
.90	591	5,467			2				
.87	570	5,273			1				
.84	549	5,078			0	5			
.81	528	4,884				4			
.78	507	4,690				3	4		
.74	486	4,496				2	3		
.71	465	4,301				1	2		
.68	444	4,107				0	1	3	
.64	423	3,913					0	2	
.61	402	3,719						1	
.58	381	3,524						0	
.55	360	3,330							NS

Add: $120 per month, $1,110 annual, to the above schedule for a person holding an earned Doctor's Degree in the area or subject taught.

Note: The monthly salary governs the total salary to be paid. The annual salary shown has been rounded off to the nearest dollar amount.

Table 34
ANNUAL SUPPLEMENT FOR TEACHERS
1967-68

Units	Graduate Certificate		A Certificate	
	Minimum	Maximum	Minimum	Maximum
Iredell County	-	-	-	-
Mooresville	$540	$ 540	$405	$ 405
Statesville	375	475	325	425
Charlotte-Mecklenburg	750	1,600	600	1,400
1969-70				
Iredell County	200	200	150	175
Mooresville	540	540	405	405
Statesville	375	475	325	425
Charlotte-Mecklenburg	845	1,920	650	1,660

In 1967-68 Iredell County paid no supplement. Not until this current year 1969-70 did they pay any supplement. For some years now the City districts have been paying a supplement. The County has been and still is in a very unfavorable position in regard to salary, to attract and retain teachers. Competition for teachers among the three districts could, of course, be eliminated upon consolidation.

A study of the figures also shows how unfavorable a position Iredell County and its two cities are in relation to Charlotte-Mecklenburg, which is directly to the south.

The supplementary tax budget for 1969-70 allowed the County to supplement professional salaries and to employ extra personnel. This offers, of course, the opportunity to attract and retain more qualified personnel and to improve education.

Quality Education

The quality of education is measured in a number of ways. One measure related to quality is expenditure per pupil. Using this yardstick in 1966-67 the quality of education in the County ranked below the two cities. In fact, ranked in terms of all the 169 administrative units in the State it ranked last in expenditure per pupil. Table 35 lists selected administrative units and their per pupil expenditures, all sources, for 1966-67.

Table 35
PER PUPIL EXPENDITURE, ALL SOURCES, BY ADMINISTRATIVE UNITS, 1966-67

Administrative Unit	Amount Per Pupil	Rank
Hendersonville	$572.08	1
Mecklenburg	478.89	19
Mooresville	415.19	109
Statesville	395.40	134
Iredell County	334.67	169

Total State: $426.29

Range of Per Pupil Expenditure:
Low - $334.67
High - $572.08
Median - $432.29

Source: A Ranking of School Administrative Units, op. cit.

Table 36 shows the per pupil expenditures for the year 1967-68.

Table 36
PER PUPIL EXPENDITURES, ALL SOURCES, BY ADMINISTRATIVE UNITS, 1967-68

Administrative Unit	Amount Per Pupil
Iredell County	$373.23
Mooresville	$473.95
Statesville	$437.37

Source: State Department of Public Instruction,
Raleigh, North Carolina

A critical issue is the expenditure level in the County. There are indications that the low expenditure level in the County may have affected education adversely.

Tables 37-41* compare the three school districts, along with Mecklenburg to the south, on a number of measures, which can be related to educational quality.

Table 37
PER CENT OF CLASSROOM TEACHERS WITH GRADUATE CERTIFICATES
North Carolina School Districts
1966-67

Administrative Unit	No. of Teachers	No. "G's"	Per Cent	Rank
Statesville	202	42	20.8	17
Mooresville	105	20	19.1	21
Mecklenburg	3,547	599	16.9	34
Iredell County	349	43	12.3	77
		Range of Per Cents		
High			43.4	1
Low			2.5	160
Median			12.1	

---

* These data are from a Profile of Significant Factors in Education in North Carolina, A Ranking of School Administrative Units, prepared by Statistical Services, Department of Public Instruction, Raleigh, North Carolina, July 1968.

Table 38
PER CENT OF PROFESSIONAL STAFF WITH OTHER THAN "A" OR "G" CERTIFICATES
North Carolina School Districts
1966-67

Administrative Unit	Total Staff	Below "A"	Per Cent	Rank
Mecklenburg	3,820	26	0.7	13
Mooresville	114	2	1.8	36
Statesville	219	5	2.3	46
Iredell County	373	30	8.0	125
Range of Per Cents				
High			21.4	160
Low			0.0	1-7
Median			4.55	

Table 39
PUPIL-STAFF RATIO
North Carolina School Districts
1967-68

Administrative Unit	1967-68 Enrollment	Total Professional Staff	Ratio	Rank
Mecklenburg	81,973	3,740	21.9	23
Mooresville	2,546	111	22.9	64
Statesville	4,965	213	23.3	83
Iredell County	9,460	371	25.5	151
Range of Per Cents				
Low			19.0	1
High			27.5	160
Median			23.3	

Table 40
NUMBER OF LIBRARY BOOKS PER PUPIL ENROLLED
North Carolina School Districts
1966-67

Administrative Unit	No. of Volumes	Enrollment	No. Per Pupil	Rank
Mooresville	28,391	2,466	11.51	20
Statesville	49,393	4,939	10.00	67
Mecklenburg	706,721	78,991	9.95	70
Iredell County	77,989	9,216	8.46	122
Range of Per Cents				
High			16.57	1
Low			5.69	169
Median			9.55	

Table 41
PER CENT OF HIGH SCHOOL GRADUATES ENTERING COLLEGE
North Carolina School Districts
1966-67

Administrative Unit	No. of Graduates	Entering College	Per Cent	Rank
Statesville	277	155	55.9	13
Mecklenburg	4,110	2,057	50.0	26
Mooresville	149	61	40.9	51.5
Iredell County	465	123	26.5	134
Range of Per Cents				
High			69.5	1
Low			11.7	166
Median			33.8	

The County Commissioners must continue to be - and the citizens of the County, too - concerned with raising quality in the County schools. An increased tax rate and more money will not guarantee educational quality. There are many factors involved in educational quality. However, a higher expenditure level will allow the County to be more competitive in the teacher market. The County will better be able to attract and retain better teachers. There should be fewer teachers with substandard certificates. It will be possible to have better supervision of staff and curriculum. The middle grade program may be expanded and improved. It will be possible to purchase more books and educational materials.

Consolidation and Equalization of Tax Effort

Consolidation should bring with it an equalization of program and services. This will require an equalization of expenditure level in the County and, of course, an equalization of tax effort. The consolidation of these units with different tax rates, different salary supplements, different services, etc., would pose serious administrative and morale problems.

The cities expect that equalization will be upward toward the expenditure level of the cities and not downward to the level of the County. Such an equalization would mean a per capita expenditure of $94, at the Mooresville level and an approximate $.45 tax rate, calculated on current valuation and enrollments.

By law the Mooresville school board may levy a supplemental tax rate up to $.40 per $100. Statesville may levy a rate of up to $.30 for the schools, this having been authorized by a vote of the citizens.

The tax rate in the County is dependent on the politically elected County Commissioners. The Commissioners may increase or decrease or retain a tax rate. The fear of the cities is that political expediency will determine the tax rate and expenditure level in the County's schools.

What Mooresville and Statesville fear is a leveling process. They cite an unwillingness on the part of the County to support education. They fear that rather than increased level of education, there will be a decreased level.

Desirably, for the cities and County, too, there would be a guarantee or agreement written into consolidation that support or expenditure level will not fall below a certain level. Most simply, this agreement would take the form of expenditure per pupil; for instance, that no less would be spent than the amount now expended by Mooresville - about $94.* In terms of the present inflated economy an annual increase of 5 per cent in this expenditure level would not be unreasonable, so that in 1970-71 the per capita expenditure would be set at about $99. The tax rate would be set accordingly by the County to raise this amount.

Costs and Tax Rate Under Consolidation

Under consolidation will there occur greater efficiency and economy, allowing more services for less cost? Can the consolidated district buy the same that Mooresville is now buying for a $94 supplemental expenditure for less? Undoubtedly, there should be certain efficiencies and economies, in purchasing and transportation, for example. However, the need for expanded services, the rising costs of maintenance and operation of buildings, of insurance, inflation and the national economy - all these factors and others will make it difficult to reduce the expenditure. The pressures are for an increase at some 5 to 10 per cent a year.

---

* This includes the amount currently raised by the County and the city.

Initially, the tax rate will, of course, increase for all residents of the cities as well as the County outside the cities. If the tax rate rises to $.45 for current expenditures, it will be an increase of $.29 for those living outside the cities, $.09 for Mooresville, and of $.12 for Statesville. These figures are estimates for 1970-71.

Optimistically, it can be expected that a rising tax base will offset rising costs, so that the countywide tax rate for current expenditures will remain near $.45, and even drop somewhat. If, for instance, costs were to rise by 60 per cent by 1975, from $94 to $150 per capita, the tax rate would remain near $.45 per $100, assuming an increased tax base, to $797,600,000. If costs were to rise by 30 per cent by 1975 to $122 per capita, the tax rate would drop to near $.38.

State aid, can, of course, be increased which will have an effect - in lowering the local tax rate.

A Gradual Equalization of Tax Effort

A major stumbling block to consolidation has been and still is the difference in tax effort between the cities and the County. Tax effort can be defined as the amount of dollars raised locally per pupil for educational purposes. The fact is that the two cities have been willing in the past to tax themselves more for the support of education. The County's citizens as recently as 1968 turned down by a vote an increase in the supplemental tax for the support of education. During the course of the study the consultants have repeatedly been told that the County will not willingly tax itself any more to support education.

It may be that a 29 cent tax rate increase will be too much too suddenly for the County resident. It may very well be that the fears of the cities cannot be allayed in order to bring consolidation about before tax effort is equalized and guaranteed. Another route is the continuance of the gradual absorption of the cities' tax rates by the County and effecting of an equalization of tax effort and program and services. Once this equalization is achieved, then consolidation may be achieved more easily.

The County Commissioners and school authorities have long been aware of a disparity in expenditure levels and the effect of such on the school children of the County. In order to equalize educational opportunity the Commissioners began in 1969-70 to absorb the local tax levies of the cities. Simply, this means that the County raised its tax rate to collect and distribute among the three units more funds. This means the County would raise and distribute more funds per capita. The two cities in receiving more from the County would have to raise less in their taxing authority and could reduce their tax rates. Table 42 shows a history of tax rates from 1965 through 1969 in the three administrative units.

Table 42
SUPPLEMENTAL TAX RATES FOR CURRENT EXPENDITURES IREDELL COUNTY, MOORESVILLE, AND STATESVILLE
1965-69

District	YEAR 1965	1966	1967	1968	1969
Iredell County	.095	.108	.10	.095	.16
Mooresville	.27	.27	.27	.27	.20
Statesville	.24	.24	.26	.24	.17

Per $100

Specifically, in 1968-69 the County raised $33 per capita with a .095 tax rate. In 1969-70 it raised $50 with a .16 tax rate. This enabled the County to institute a supplement for the professional staff for the first time and to employ some extra personnel. It allowed the cities to maintain their local expenditure level and at the same time reduce their tax rates. What was accomplished was a start toward equalization of tax effort and educational opportunity in the County.

Costs per pupil are continuing to rise. Inflation, the rising costs of services and materials, the investment in increased and improved educational services and materials - these will all contribute to rising costs. The State salary schedule increased by 9+ per cent from 1969-70 to 1970-71. Locally financed costs will also go up - costs for insurance, utilities, maintenance, clerical and janitorial services (the so-called housekeeping costs), cost for salary increases for additional personnel beyond the State allotment. If the educational program is not to suffer, these increased expenditures must be met with increased revenue.

Certainly, the County should not cease to absorb the supplemental school tax levies of the two cities. There should be an annual increase each year in the amount raised per capita (at least 5 per cent) to offset increased costs and the inflationary spiral. The goal should be more than the equalization of educational opportunity and program for the whole County; it should be more than the bringing of the County up to the level of the two cities. A new level should be reached, beyond what the cities have already achieved or would have achieved independently.

Whether at or before consolidation, the absorption by the County of the cities' supplemental tax could bring about an equalization of educational opportunity throughout the County, including the cities, for all the County's children. This makes good sense in that children now resident in the County may very well become residents of the cities and those now living in the cities may well move into the County. A young person educated in one of the cities may marry a person educated in the County. In short, in a multitude of ways the proximity of County and cities demands an equalization of opportunity and program.

Table 43 shows the amounts raised per capita and the tax rates for 1969-70 and the proposed amounts to be raised in 1970-71 and estimated tax rates, if the County is gradually to continue to absorb the levies in the cities and at the same time meet rising costs and provide increased educational services.

The per capita expenditures of $60 distributed throughout the County will allow the County to meet increased costs, to increase its low supplements by approximately 40 per cent, and to employ three or four more additional personnel.

Table 43
AMOUNT RAISED PER CAPITA AND TAX RATES
IREDELL COUNTY, MOORESVILLE, AND STATESVILLE
1969-70

Administrative Unit	1969-70		1970-71 Estimated	
	Per Capita	Tax Rate	Per Capita	Tax Rate
Iredell County	$50.00	.16	$60.00	.202
Mooresville	43.36	.20	38.34	.16
Statesville	35.49	.17	29.05	.13

The estimated tax rate increase of approximately $.04 at the County level will provide this $60 per capita. The cities will be able to reduce their rates by $.04, and provide for increased costs and expanded services, at approximately 5 per cent.

It is to be noted that the figures for 1970-71 are estimates. They are based on a number of assumptions, that costs in the cities will rise about 5 per cent and on projected property valuations. Once the budgets have been finalized in the three districts, the figures will need to be calculated in terms of other revenue available, of exact property valuation, and of actual monies needed for the fiscal year 1970-71.

Capital Outlay

In North Carolina the financing of school construction has been largely left to the school administrative units. In Iredell County capital outlay funds are raised by County taxation and distributed to the three administrative units on the basis of a mutual agreement of the three Boards of Education and of the County Commissioners.

Table 44 shows the amount allotted to each administrative unit under this agreement. The agreement extends from July 1, 1967, to June 30, 1971. In each of these four years, a sum of $1,000,000 is collected and then allotted to each unit. The annual allotment is based on need for particular facilities in the immediate district, not on per capita figure. At the end of the four years, however, each unit will have received an allotment of the total amount collected, of the $4,000,000, on the basis of its enrollment. The County having the largest enrollment receives the greatest part of the $4,000,000, and Mooresville having the least receives the smallest part.

Table 44
ALLOTMENT OF CAPITAL OUTLAY FUNDS
IREDELL COUNTY, MOORESVILLE, AND STATESVILLE
1967-68 through 1970-71

Administrative Unit	1967-68	1968-69	1969-70	1970-71	Total
Iredell County	$ 336,400	$ 630,825	$ 630,825	$ 613,150	$2,211,200
Mooresville	480,000	25,000	25,000	52,400	582,400
Statesville	183,600	344,175	344,175	334,450	1,206,400
Total:	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$4,000,000

The tax rates for capital outlay purposes for the past three years have been as follows:

1967	.41
1968	.315
1969	.302

In terms of bonded indebtedness the County is in an excellent position. As of June 30, 1970, total bonded indebtedness was $22,000. Its bonding capacity is 5 per cent of its assessed valuation. In 1969-70 assessed valuation is set at $357,464,445. Five per cent of this figure is $17,873,322. There must, of course, be subtracted from this the $22,000 plus any other indebtedness assumed by the County. As valuation increases, so too will lending capacity.

Although the County is at present on a pay-as-you-go basis in regard to school construction, it can sell bonds to finance new schools.

Consolidation will place different demands on building and building utilization. The kind and location of buildings should be determined in light of total County needs. Previous to consolidation, the County Commissioners may want to review the construction plans of the administrative units in light of total County needs prior to making any allotment of funds. It would be unwise to allow the individual units to build facilities which might meet their particular needs but which would be disadvantageous or undesirable under consolidation.

Capital outlay programs should be decided on the basis of need, by priority, rather than on a per capita basis.

VIII

ANALYSIS AND RECOMMENDATIONS

Consolidation - Educationally Desirable

The real question raised in a study of this kind is: is it desirable educationally, is it the best step for the boys and girls of the three districts for the three districts to consolidate into a single unit?

The consultants believe that consolidation of the three districts into a single administrative unit will provide the best organizational context for quality education.

The equalization of educational opportunity for all pupils in the County is, of course, the most desired outcome and the major benefit of consolidation. In order to accomplish this equalization of opportunity, there must be an equalization of tax effort in the now three independent units, an equalization of expenditure per pupil, and an equalization of services and materials. With consolidation must come this equalization of tax effort discussed in the previous chapter, Financial Considerations.

Advantages of Larger School Districts

The consultants recently completed a study in the State of New Jersey.* Some of the findings of that study are pertinent here.

For an independent opinion on excellence in school systems, county superintendents were asked to name two systems in their counties which they felt were providing the finest educational programs. These systems were then studied to determine what qualities they had in common and how they differed from the average.

---

*Engelhardt, Engelhardt and Leggett, Pilot Study of School District Reorganization, State of New Jersey, January, 1968.

None of the superior school systems had fewer than 1,000 students and only seven per cent of them had fewer than 2,000 students. Although 61 per cent of the systems in New Jersey had fewer than 4,000 students at the time, only one-third of the superior school systems were in this size range. Forty per cent of the superior systems had over 7,000 students, although only 22 per cent of the systems in the state were that size. It appeared then, that possibilities for excellence increased with size. In school districts with fewer than 4,000 students excellence was less common, although not unknown.

For high schools, grade size was closely related to excellence. Forty-four per cent of the superior schools had over 500 students in grade ten, while only 23 per cent of the New Jersey systems had that many.

It appeared that excellence was no more expensive than mediocrity. The median cost per pupil for superior districts fell in the same range as the median cost for all New Jersey districts.

The quality of a school's program is clearly related to the quality of its teachers. Experience and professional training help the teacher do a better job. Higher salaries make it easier to attract and hold good teachers. Small classes make it possible for the teacher to devote more time to individuals.

In teaching experience, the superior districts did not vary from the norm. Superior districts had a higher percentage of teachers with advanced degrees; in the median of the superior districts 25 to 29 per cent of the total staff had master's degrees or better, while the median for all New Jersey districts was 15 to 19 per cent. Only a fourth of the superior districts had staffs on which less than 20 per cent of the teachers had advanced degrees, yet over half of all New Jersey districts were in this category.

The median teacher salaries in superior districts was slightly higher than for the state as a whole. The pupil-teacher ratio was also slightly better in the superior districts: only 21 per cent of the superior districts averaged over 25 students per teacher as contrasted to 33 per cent for the state.

What were the characteristics of the high school in superior districts? Nineteen per cent of the high schools in superior districts had enrollments of 2,000 or more, while only 10 per cent of all districts in the state had high schools of that size. The median enrollment in high schools in superior districts was between 1,250 and 1,499.

These high schools also offered more different courses in grades nine through twelve, indicating greater ability to meet the differing needs of students. Only 11 per cent of the high schools in superior districts had fewer than 80 courses, while 38 per cent of all New Jersey districts serving high school grades had fewer. The median for the state was 80-89, for superior districts 90-99. In order to have a better than even chance of offering 80 or more courses, it was necessary to have at least 350 students in grade ten. Only 4 per cent of the schools with fewer than 250 per grade were able to offer 80 or more courses.

Implications for Iredell

There are several implications of this study which are of significance in considering consolidation of Mooresville, Statesville, and the County schools. The first point is of particular importance to taxpayers. It appears that larger school districts have improved opportunities producing high quality education at no increase in cost. The advantage of size is not that the system is cheaper, but that service to children may be improved. Therefore, one might expect that the consolidation of the total County into one system would not produce tax savings but would hold out the promise of improved educational opportunity. It is also important to note that only opportunity is offered. Size in itself is no guarantee of high quality. Adequate size simply makes the possibility greater. Intelligent utilization of human and material resources is also required for fulfillment.

The second point to be made is that small high schools are not fully adequate to meet the needs of youth. Of course, a small school can offer a wide variety of courses but only with very small classes, extra space, and consequent exorbitant costs. The New Jersey study indicates that at least 350 students per grade in the high school years would be desirable in order to obtain superior performance and to offer a wide variety of courses. This implies a three-year high school of at least 1,050 students, or a four-year school of 1,400.

Mooresville High School at 516 pupils is obviously too small. It averages 172 pupils per grade. A review of the State report indicates the following courses:

Subject Field	Courses
English	6
Mathematics	6
Science	5
Social studies	6
Foreign languages	5
Business	8
Distributive education	3

Subject Field	Courses
Home arts	3
Industrial arts-vocational	4
Art	2
Music	4
Physical education	4
Total:	56

In order to improve the variety of offerings, it would be desirable for Mooresville High School to be almost double its present size. Because of its present location, it could ideally serve the entire southern portion of the total County. Consolidation should bring with it the expansion of Mooresville High School with an increased variety of educational offerings.

Statesville High School contains 948 students. At 316 students per grade, it is marginal in size. Course offerings are as follows:

Subject Field	Courses
English	9
Mathematics	4
Science	4
Social studies	4
Foreign languages	7
Business	10
Distributive education	1
Home arts	4
Industrial arts-vocational	8
Art	0
Music	2
Physical education	3
Total:	56

As in the case of Mooresville, adding ninth grade courses brings the total up only slightly (to 62) because of the limited electives in grade nine. In addition, several ninth grade offerings are duplicated in grade ten such as Algebra 1, Latin 1, and Home Economics 1.

It is evident then, that a larger Statesville High School would be desirable in terms of variety of offerings. The enrollment projection, however, calls for only a modest increase in membership during the next ten years. Again, consolidation could result in some enlargement of the school membership with greater opportunities for program selection.

At North Iredell High School, the following offerings are available in grades nine through twelve:

Subject Field	Courses
English	7
Mathematics	5
Science	6
Social studies	8
Foreign languages	6
Business	7
Distributive education	3
Home arts	6
Industrial arts-agriculture-vocational	9
Art	2
Music	2
Physical education	4
Total:	65

With a building capacity of 960, it can be seen that this high school is also suffering from the effects of small size. It should be expanded to meet growing enrollments in the County and to alleviate overcrowding.

South Iredell High School is slightly larger, with a capacity of 1,023. Course offerings in grades nine through twelve are as follows:

Subject Field	Courses
English	9
Mathematics	6
Science	5
Social studies	7
Foreign languages	5
Business	7
Distributive education	3
Home arts	6
Industrial arts-agriculture-vocational	11
Art	2
Music	2
Physical education	3
Total:	66

As in the case of the other schools, it is apparent that this high school is too small. Expansion to relieve overcrowding and to handle County growth will help to improve its size and permit a gradual increase in course offerings.

A comparison of course offerings by subject fields among some selected larger schools and the smaller Iredell high schools is shown in Table 45. The academic areas and art are subject fields which appear to grow with school size. Patterns of business and vocational-agricultural-industrial offerings are functions of the types of communities served and local employment opportunities, but even here the total is noticeably less in the Iredell schools.

Course offerings will vary from time to time; it is not valid to compare the four high schools in Iredell County purely on the basis of course offerings. What is important is that all four schools are too small and that this is limiting their ability to meet student needs. Additions to these schools, rather than the construction of additional high schools, should take place first. Consolidation would provide the rationale for expansion of the Mooresville and Statesville plants and student populations.

It should be noted that the sizable Negro settlement on the eastern edge of Statesville in the County should not be included in the Statesville High School population under consolidation. Reasonable racial balance in the various high schools would be better maintained by continuing these children in South Iredell High School.

Table 45
NUMBER OF SELECTED COURSES IN SELECTED SCHOOLS

Subject Area	Mooresville (10–12) 516 Pupils	Statesville (10–12) 948 Pupils	North Iredell (9–12) 1,360 Pupils	South Iredell (9–12) 1,375 Pupils	Trumbull, Ct. (10–12) 1,100 Pupils	Montclair, N.J. (10–12) 1,200 Pupils	West Essex, N.J. (9–12) 1,350 Pupils	Dover, Del. (9–12) 1,300 Pupils
English	6	9	7	9	9	15	10	22
Social studies	6	4	8	7	9	10	10	
Mathematics	6	4	5	6	7	10	12	8
Science	5	4	6	5	8	7	9	12
Foreign languages	5	7	6	5	23	21	20	8
Business & distributive education	11	11	10	10	15	12	15	13
Art	2	0	2	2	6	8	8	5
Industrial arts, agriculture, and vocational education	4	8	9	11	11	13	10	21
Music	4	2	2	2	7	8	5	3
Home arts	3	4	6	6	6	7	5	8
Physical education/ health each year, driver education, and others	4	3	4	3	5	5	6	5
Totals:	56	56	65	66	106	116	110	105

Consolidation - Financially Desirable

The second question raised in a consolidation study is: is consolidation financially feasible for the three districts? Is consolidation financially advantageous for each of the three districts? Will there be greater efficiency and economy in the operation of the schools in a consolidated unit than in the three districts as separate entities?

The consultants believe that consolidation is financially feasible, as discussed in the chapter Financial Considerations. Furthermore, they believe consolidation to be financially advantageous.

As discussed in the previous chapter, Iredell County has the financial ability to support education at a higher level than it has in the past. Valuations (ratables) have been increasing faster than enrollments in the County. This trend is expected to continue.

The analysis of school building needs and the estimated costs to meet these needs showed a significant saving of $600,000 through consolidation. This is enough saving to build a 500-pupil elementary school. It is a figure significant enough to be given considerable weight in the decision to consolidate (see Chapter IV).

Another benefit growing out of consolidation will be the elimination of competition among the three districts for capital funds. School building construction can be determined on the basis of total County needs rather than on a per capita, per district basis.

Current expenditures cannot be expected to decrease. It will cost money to equalize educational opportunity in the County school district and to equalize expenditure levels throughout the County.

However, whether the districts remain independent or consolidate, it is going to cost the County residents tax money to equalize educational opportunity in the County school district - to equalize the educational expenditure of the County with those expenditure levels of the two cities.

For the same dollar, however, a larger consolidated district will be able to buy more, in materials and in services, through greater efficiency and through such economies as volume purchasing.

Other Benefits of Consolidation

Benefits of consolidation are referred to and discussed throughout the report. Several of these benefits are brought together and discussed below.

1. Improved utilization of existing facilities.

   Consolidation will bring with it an improved and logical utilization of existing facilities. Pupils will be assigned to the schools nearest their homes. Artificial school district lines within the County will no longer be a determining factor in school assignments.

   An expanded Mooresville High School will serve the southern part of the County. The Statesville High School will serve the center of the County. An expanded North Iredell High School will serve the north, and an expanded South Iredell High School will serve the south-central part of the County.

   As noted previously, the establishment of a Countywide organization of K-6, 7-9, 10-12, and of three-year high schools will relieve the overcrowding in the four-year Iredell County high schools. It will further allow a 300-pupil addition to the Mooresville High School, bringing the capacity of this school to nearly 1,000. This size high school will be in a much better position to offer a broader curriculum.

   Consolidation will relieve overcrowding in the Statesville junior high schools. Because enrollments are expected to decrease somewhat at this level, an addition is not desirable.

   Housing grades seven through nine together in a junior high school program should also result in better facilities and a better program for the seventh and eighth grades.

2. Increased efficiencies and economies as a result of centralized:

   a. Administration
   b. Purchasing
   c. Transportation
   d. Maintenance
   e. Food service
   f. Supervision

Statesville does not provide any school transportation. Mooresville has some transportation. Children are transported via buses owned by the Mooresville school district. These buses are maintained through the County garage with State funds. The County operates a number of buses, of course, over a large distance. There would be no difficulty in regard to transportation if the three districts consolidated. In fact, some routes could be made more efficient. Distances to assigned schools could be shortened in some cases.

3. Increased and additional specialization of training and effort. (See Chapter VI, Administrative Organization.)

4. Consolidation can end the competition among the three districts for teachers. As it is now, of course, Mooresville and Statesville with the higher teacher supplements can attract and retain teachers more readily than can the County.

Summary of Major Recommendations

The recommendations of the consultants are summarized below.

A. The three administrative units of Iredell County should be consolidated into a single administrative unit. This unit will have one board of education and one chief school officer.

B. Equalization of tax effort and expenditure level should be achieved along with consolidation. See Chapter, Financial Considerations, for a complete discussion of this recommendation.

C. The newly organized unit should move toward a grade organization of 1-6, 7-9, 10-12, with kindergarten to be added as soon as possible for a K-6, 7-9, 10-12 organization.

D. The newly organized district should undertake a building program to meet enrollment, facility, and program needs - a building program which will allow the above recommended grade organization.

E. The building program should consist of two phases:

Phase I (immediate action and completion by 1973 and 1974)

1. Build a 300-pupil addition to the Mooresville Senior High School. Renovation of the existing structure should take place at the same time. Transfer athletic fields to junior high school site across the road.

2. Build a 600-pupil addition to the Troutman Junior High School.

   Build a 600-pupil addition to the Mooresville Junior High School. Expand site.

   Build two new 900-pupil junior high schools: one on the North High School site, and one on the east side of the County.

3. Replace the South Elementary School in Mooresville. Site already purchased.

When Phase I of the building program is completed by September, 1974, as a target date, the school facilities should be used thus and will have the following capacities:

Senior High Schools	Grades	Capacity
North	10-12	960
South	10-12	1,023
Mooresville	10-12	934
Statesville	10-12	1,062
Total:	10-12	3,979

Junior High Schools	Grades	Capacity
Mooresville	7-9	1,145
D. Matt Thompson	7-9	485
Oakwood	7-9	660
Troutman	7-9	1,020
North (new)	7-9	900
East (new)	7-9	900
Total:		5,110

Elementary Schools	Grades	Capacity
	K-6	11,888
GRAND TOTAL:		20,977

Phase II (completion by 1976 and 1977)

1. Enrollment projections show that, by 1980-81, there will be a need for the following additional spaces:

Grades 10-12	-	700 spaces
Grades 7-9	-	200 spaces
Grades K-6	-	2,000 spaces

2. The junior high school space needs can best be met probably through a single addition on the East Junior High School. The placement of the addition will need to be assessed in the light of population movement and enrollment growth in the mid-1970's.

3. Renovation of the D. Matt Thompson Junior High School should be undertaken.

4. The senior high school needs can be met through additions to the existing schools, or with a new high school of 1,000-pupil capacity. Again, this must await an assessment of population and enrollment growth in the mid-1970's.

5. The elementary school needs will best be met through new facilities - four schools, each with a 500-pupil capacity. The locations of these schools will depend on population concentrations. The consultants believe that elementary schools should be neighborhood schools, to encourage cooperation between home and school, between parent and teacher.

6. During the next ten years attention must be given to renovation and replacement of elementary facilities. The Mulberry School in Statesville should be replaced; so, too, should the original section of the Parkview building in Mooresville. In the County, if Brawley is not thoroughly renovated, it should be replaced. The same can be said for parts of the Celeste Henkel School. The original building at Monticello must also be replaced.

In view of the building needs, it would be desirable to undertake the entire building program, Phase I, as recommended by the consultants, at a cost of $6,522,000. This appears wise at the present time because:

1. The facilities are needed.
2. Construction costs continue to rise at 10 to 12 per cent a year.

These costs lie well within the County's bonding capacity which is discussed in the chapter, Financial Considerations.

The Commissioners might consider selling bonds for the junior high school construction, or for part of it, and financing the construction of the 300-pupil addition to the Mooresville High School and the replacement of the South School in Mooresville on the pay-as-you-go basis.

APPENDIX

VOCATIONAL EDUCATION

Particular attention in this survey has been given to the future of vocational education in Iredell County. Conferences have been held with people having diverse sources of information. A vocational program provides an area work force with needed skills, can update skills in the industrial and service labor market, and, in the case of vocational agriculture, is charged by the State with dissemination of new farming practices and adult training. The vocational teacher can profitably interact with adult practitioners as an employee of industry during vacation periods or as a counselor to farmers. By interacting with the employers of their students, vocational teachers receive information necessary for evaluating their own instructional program and incorporate into their curriculum new ideas found outside the school. The use of summers, with proper management, can provide continuing work experience for vocational teachers. It is also a possibility that some highly skilled individuals might be brought into the classroom as resource people during their season of low employment. The vocational program in Iredell County can and should be directed by a person (with an advisory council) who feels that this program is a strong link with the total community. The industrial, business, service, and agricultural communities benefit from such liaison along with the school program.

Do We Need Vocational Education?

It has been obvious to leaders and citizens of Iredell County that a complete vocational education system is needed for all of its citizens. At present, the Iredell County system is leading the County in per cent of secondary students enrolled in vocational courses. Table 46 presents the latest statistics available from the State in its 1968 Profile of Significant Factors in Education in North Carolina: A Ranking of School Administrative Units.

Table 46
SECONDARY STUDENT ENROLLMENT IN VOCATIONAL COURSES
IREDELL COMPARED TO OTHER AREAS
1968

Item	School System		
	Iredell	Statesville	Mooresville
Total 1968 Secondary Enrollment	2,563	1,338	697
Vocational Enrollment	1,735	436	207
Per Cent of Total Enrolled in Vocational Courses	67.7	32.6	29.7
Rank within State's 160 Units	31st	141st	147th

Descriptive statistics and reference points:

State average percentage is 48.8
State middle (median) percentage is 54.4
Lowest percentage is 16.6
Highest percentage is 94.4
Mecklenburg was 24.2% or 153rd in rank
Hickory was 20.2% or 158th in rank
Lenoir County was 81.5% or 8th in rank
Rowan was 52.4% or 88th in rank
Catawba was 48.6% or 101st in rank

Symptoms of the need for a vocational program include:

1. Business will have some openings for high school graduates having entry-level skills. Entry-level skills include knowledge of vocabulary and a sense of safe shop behavior as well as training in the use of materials and techniques appropriate to the work area.

2. Business complains that attitudes toward work of new employees leave something to be desired. Often high school graduates do not seem to receive enjoyment from a job well done; they lack a work ethic which many graduates of vocational programs possess.

3. Consumers (including home owners) complain that they wait long periods of time for repair service. Often the repair does not remedy the trouble. Except for vocational agriculture programs in the County schools, students are not taught appliance or motor repair skills in the schools. Statesville has a small, weakly-financed carpentry repair and cabinetmaking shop in its high school.

4. As is true in most schools across the nation, skills learned in elective courses in secondary schools rarely prepare boys and girls to handle home repair and remodeling. Some college preparatory pupils can get this training in the County High Schools and to a lesser extent in the Mooresville Junior and Senior High Schools.

5. The high schools are primarily college preparatory in subject matter and methods. (This is the most economical training to give; a fact which may explain its predominance.) In some schools an exceptionally large number of students enter college or post-high school training. The statistics from guidance counselors will not be quoted since several faults lead to misinterpretation. It should be noted that:

    a. Post-high school training is defined differently by various schools.

    b. There is reason to believe that follow-up statistics two years after graduation would give a more valid picture of career goals; a study of dropouts from college should be made by counselors at some time.

    c. Most students may be forced to go to college since no real alternatives are left to them by their parents.

    d. Students may find, after matriculation, that certain colleges offer programs which are not sufficiently challenging to their interests.

Some contributing factors to very high college enrollment figures include (1) present popular cultural pressures by news media and parents, (2) modest entry requirements at nearby colleges, (3) modest costs of nearby colleges, and (4) misplacement of students because of a lack of occupational experience in the secondary schools. Pamphlets in a guidance office are a poor substitute for course work in various occupations. Iredell County, including the cities, may be more like a cross-section of the United States than the people of Iredell think. We should talk about percentages of students who should go on to college rather than the percentages that do.

6. Some people wish to create an even better tax base in the County by creating a skilled labor pool. The new census may indicate less commuting into Iredell County for jobs. Neighboring industrial centers (Winston-Salem, Hickory, Salisbury, and Charlotte) might absorb vocational graduates before Iredell industry can hire them. To prepare graduates for surrounding industry only would not be advisable, but surrounding markets for labor can be used as a buffer to guard against overproduction in a particular vocational area before programs can be modified.* A flexible system of vocational education is an important factor in attracting certain types of industry. Furthermore, the graduates of the vocational program have the necessary attitudes and literacy to be retrainable in company education programs.

7. In order to keep some students in school and enable them eventually to acquire high school level communications skills, appreciations, and understandings, we must offer course work which has immediate reward and practicality. Occupational education makes theoretical courses more pertinent and understandable for even college preparatory students. Even if industry does not wish to have schools teaching entry-level skills for jobs in such areas as textiles, some actual job training may have to be given to cultivate interest and pride in the program. Graduates of a vocational program should have definite pay advantage over nongraduates when entering industry. In grades eight through twelve, withdrawal figures (see Table 47) indicate about five per cent of students become actively disenchanted with a college preparatory high school; other students stay in school but are undoubtedly passively disenchanted. Where large enrollments occur in vocational courses, percentage of dropouts decreases.

---

*Surrounding areas can act as "buffers" in at least two ways:

1. Employers outside Iredell may employ graduates of new programs prior to attracting new industry to Iredell.
2. In case of overproduction of skilled labor, the variety of neighboring employers can absorb skilled labor force produced prior to revision of curriculum.

Table 47
PER CENT OF DROPOUTS FROM GRADES 8-12
Iredell County, Statesville, and Mooresville
1966-67 through 1968-69

Year	Item	School System		
		Iredell	Statesville	Mooresville*
1966-67	Total Enrollment	3,271	1,730	875
	Dropouts	237	113	36
	Per Cent Dropouts	7.2	6.5	4.1
1967-68	Total Enrollment	3,368	1,748	889
	Dropouts	179	81	47
	Per Cent Dropouts	5.3	4.6	5.3
1968-69	Total Enrollment	3,391	1,751	878
	Dropouts	158	93	49
	Per Cent Dropouts	4.7	5.3	5.6

*Consultants were able to deduct figures in Mooresville for pupils who were excused from school attendance because of physical or mental disability or who were committed to correctional institutions (W7-W8). All other figures include state coded reasons (W5-W12).

8. There is evidence that, where a vocational program exists, aspects of school maintenance are improved. Vocational education can train, as well as serve a maintenance or minor construction function in schools. Vocational agriculture is an example of this, as well as some projects done in the high schools of Statesville and Mooresville.

9. Where strong vocational programs exist, there have been elements of strong community ties among the school, potential employers, and postgraduates. Although a surprising number of college graduates return to Iredell County, there is usually a predominance of non-college-preparatory high school graduates in the home town alumni of a community.

To pay attention to the concerns of this element of the population nurtures a support for education which is considered relevant to the community's needs. Most parents want their children to become self-fulfilled, productive citizens. (If parents feel that college education is the only route to this goal, the school system must help create an improved community image of jobs open to intelligent and skilled high school graduates.)

10. The availability of open places in apprenticeship programs is evidence that there is ability to follow training in appropriate fields.

11. Estimated growth of Iredell County points to excellent opportunity for practice of vocational and related avocational skills that could be taught in an expanded vocational program. Unhampered by any restrictive union practices, the school system could play a large part in the development of the County.

12. Highly successful local adult education programs in North Iredell and Statesville are testimony to the need for an adult program, often in conjunction with neighboring state-supported technical institutes. Adult programs include high school equivalency, vocational, avocational, general education, and some professional courses. Often adult education has raised the sights of children of the participating parent.

What Philosophy of Vocational and Industrial Arts Education Is Appropriate?

Despite the increase of leisure time in our way of life, occupations utilize a very large part of our waking hours. For a large portion of citizens in Iredell County, their avocational interests are significant income producers - a situation turning a second occupation into an enjoyable, yet not strictly leisurely, activity for hours after the primary wage-earning job. The type of occupation for which one is qualified often influences aspirations in leisure-time activities, be they as diverse as reading, sports, or participation in government. Public elementary and secondary education should pay attention to such an essential facet of our life as our future occupation.

If we admit that most of our students need* not go on to liberal arts colleges, and that we prepare very few vocationally skilled graduates, we will see a large percentage of students who need guidance in the area of occupational choice and preparation. A number of these students may elect to further their education in technical schools. However, many will enter the world, tired of schooling and not prepared for any particular work. In fact, many students are criticized for not "knowing what work is." To "know what work is" is part of a liberal education; it is part of knowing yourself and your own capabilities. In fact, to have achieved at work is essential for self-respect. (Young children constantly exhibit evidence for this last assertion.)

If some students are ill prepared for work or future education - a member of this group has sometimes been called a "gray-area student" - we must restructure the curriculum to avoid placing students in an unrealistic, uninspiring, albeit economical program of studies. The restructuring will require better funding for facilities and a willingness of teachers to deviate from an academic lecture approach. When interviewing teachers, your consultants found many teachers ready to try new approaches for the "average" student in order to increase his enthusiasm for school. It is practical to start a program to diminish the number of "gray-area" students without pressuring them into college.

---

*Need is meant to have significance in two ways:

1. Society may not need so many college graduates.
2. The individual does not have to go to college for a fulfilled life with challenge, respect, and moderate to high income.

In conclusion, we might say that public secondary education accepts the responsibility for preparing youth for essentially three courses of action following high school:

	Future Course of Action	Term Applied to Student
1.	Enrollment for four-year professional or two- to four-year liberal arts training at colleges and university	College preparatory and/or preprofessional student
2.	Enrollment for two-year technical training at such institutions as Mitchell College; Catawba and Rowan Technical Institutes; Central Piedmont, Wilkes, and Lenoir County Community Colleges	Prevocational student
3.	Entrance into gainful vocations immediately upon graduation	Vocational entrant

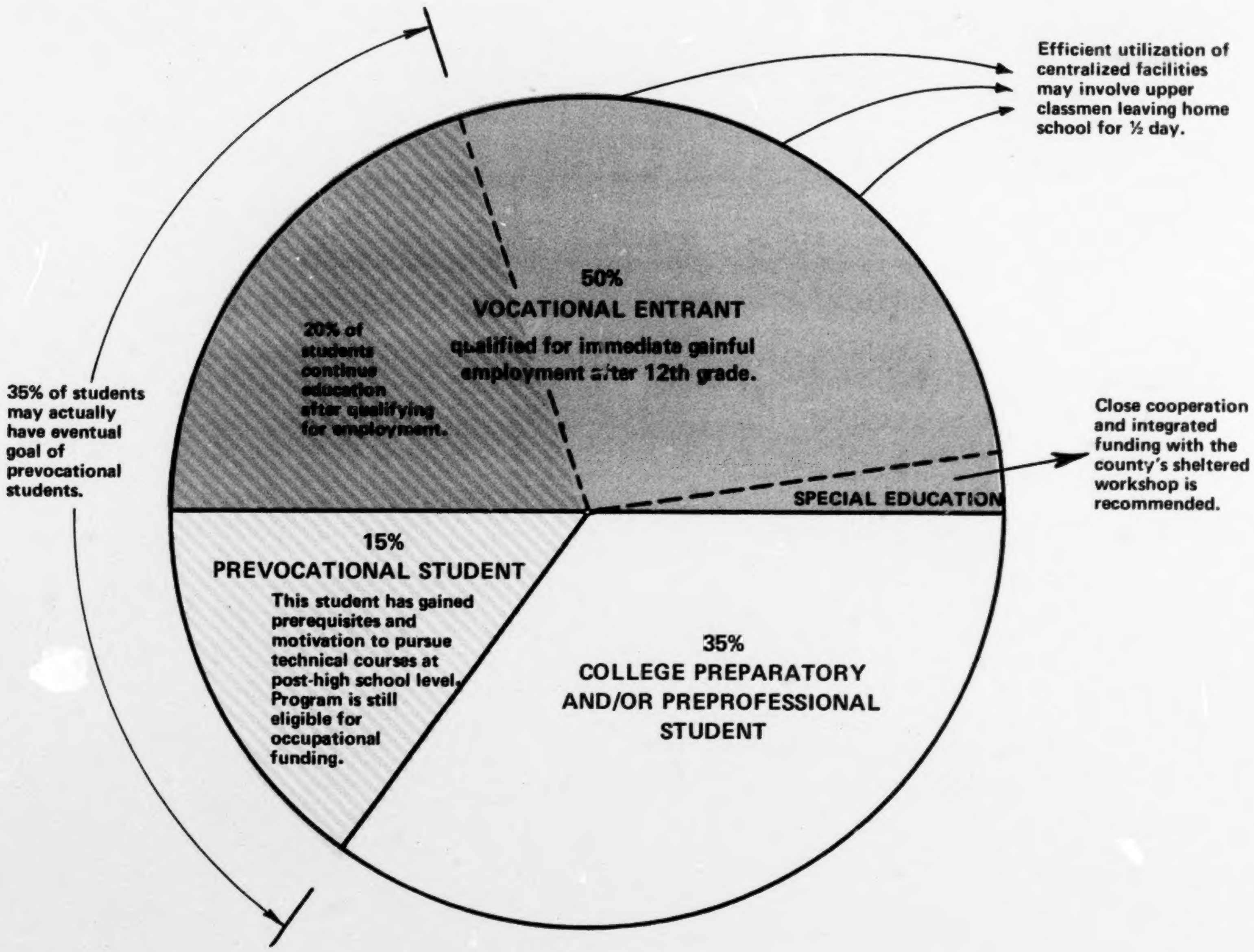
Nationally, the percentages of students in these categories of college preparatory, prevocational, and vocational entrant have been estimated to be approximately equal when appropriate programs are established. (See Chart 16.) If one classified students as to their interest, there would be overlap among the categories. A diversified program provides guidance where the overlap occurs. It is interesting to note that this philosophy does not allow a student to enter that large group of students who are undecided about their goals, although certain methods of administration do offer opportunity to change.

The programs now being encouraged with federal and state funds consider occupational education to start earlier and encompass more students than the vocational programs of the past. The new programs retain the criteria of giving job-entry skills to

CHART 16

PER CENTS OF STUDENT BODY WITH VARIOUS GOALS FOR FUTURE

(Although figures are based upon desirable national figures, these figures could well apply to every high school in Iredell County, including Statesville and Mooresville.)



the student who spends a large portion of his time in the job program; this concentration distinguishes the new programs from traditional industrial arts courses which taught hobby skills, but few skills for gainful employment.*

Occupational education is a program which combines introductory vocational education, trade and industrial education, agricultural education, industrial cooperative training, distributive education, special education, business and office education, industrial arts, and home economics. It involves, but often does not fund, departments in fine arts, science, mathematics, social studies, and other departments which may wish to modify their program for noncollege students. The concept of occupational education denotes a change from the expensive vocational education for a select few and the usually associated inadequate job preparation given through many industrial arts and home economics programs. Occupational education may imply preparing approximately 50 per cent of students for gainful employment immediately after graduation from high school. Twenty per cent of these students may wish to go on to technical or junior colleges full or part time. Attaining job skills could also aid students if they must pay their way through higher education. Other students (possibly 15 per cent) in the high school could be stimulated (but not fully trained) by the occupational program so that they may wish to pursue postgraduate technical courses in the regional vocational school, junior colleges, and four-year technical colleges. (See Chart 16 for further explanation.)

---

*It was not intended that industrial arts education be as it usually is today. It originated as a city counterpart to vocational agriculture in some instances and sometimes as a program for those denied entrance into highly selective regional vocational schools. Industrial arts education began with noble designs of (1) giving marketable, generalized skills to high school graduates for industry, (2) giving all students an appreciation of modern industrial management and production skills, and (3) providing basic skills with certain tools and procedures. Home economics was a counterpart for girls mainly to give training for future homemakers and consumers. Homemaking was rarely occupationally oriented. Industrial arts and home economics students usually spent one to two hours a day on an elective, or required, one-half to one-year course basis, whereas vocational students spent four hours a day in shops. Obviously, the industrial arts student was not able to build as good a repertoire of skills as vocational students.

The remaining 35 per cent of the students will be college preparatory, optionally gaining an entry skill for business or industry. Aside from a financial advantage in possessing a marketable skill, the college preparatory student becomes well rounded and more certain that college, rather than a technical-vocational future, is for him. Rather than meeting failure in an academic atmosphere, many bright students choose a successful route in occupations heretofore unknown to most students. For the college-bound youngster, occupational education gives added awareness of occupational choices and allows him to associate with and appreciate the non-college-bound student in class activities. Skills gained in occupational courses are extremely useful in an area like Iredell County where many home owners service their own needs and sometimes engage in farming or landscaping. Avocational training is a direct result of occupational programs.* It should be noted that with a fully operational program in occupational education (see Chart 16), there is no "general curriculum" student. Your consultants recommend adoption of the integrated programs of "occupational education" rather than those of traditional vocational or industrial arts education.

---

*There is evidence that the present vocational agriculture programs are highly successful as avocational courses, even to the extent of being elected in their entirety by some college preparatory students. When this happens, careful guidance must be given to the students in selecting colleges. For example, some colleges require a foreign language for entrance; the college preparatory student who elects a full agricultural program may not have time in high school to fulfill such a requirement.

There are many ways to schedule students: half-day and five-period students may be combined in classes or separated by morning and afternoon blocks of time. There are advantages to both systems; the mixing of students in the same class offers a social advantage at the heart of occupational program theory. Concurrent teaching allows students to gain respect and understanding for one another no matter what specialized program they elect, college preparatory or technical. Concurrent teaching also permits half-day students to help the teacher in a project-centered curriculum catering to individual progress. Half-day students can help five-period students and soon a dialogue may begin. Others claim that teachers find it more convenient to have classes homogeneous in ability to comprehend theory. The director and his teachers should find which scheduling arrangement works best. Each course may have a "five- or ten-period" curriculum which is not job entry oriented, but rather avocational or prevocational. Occupational courses open to juniors and seniors in North Carolina are in the specialization stage. We are suggesting two types of specialized courses: one is the concentrated specialization (half-day student), and the other is the acquaintance specialization (five- to ten-period student). Juniors and seniors (possibly sophomores) can elect a half-day program. The hours per day can be flexible. Eventually skill levels rather than the time spent in class should be the standard of achievement.

What Type of Facility is Appropriate?

For an occupational education program, the proper facilities must permit dual use of most shops and rooms by half-day students and five- to ten-period students. This does not allow busing of students, except in the most advanced stages.

Your consultants suggest that basic facilities should be added to all existing schools. Basic facilities are the least expensive spaces to equip and provide introductory courses for freshmen and sophomores. Advanced facilities which do not involve expensive equipment can also be added in local schools where needed. In these advanced, local facilities, avocational education can accompany half-day student programs and use of facilities be made by related departments.*

Advanced and extremely expensive facilities should be provided at a centralized facility. An alternative to this strategy is to allow each school to specialize in one advanced, expensive area and to bus students for portions of the day to various schools. There are disadvantages to this alternative: it requires more involved and longer bus routes; it also may not succeed because some students may be reluctant to participate in classes at a "rival" school. Maps 7 and 8 illustrate the alternatives of these plans.

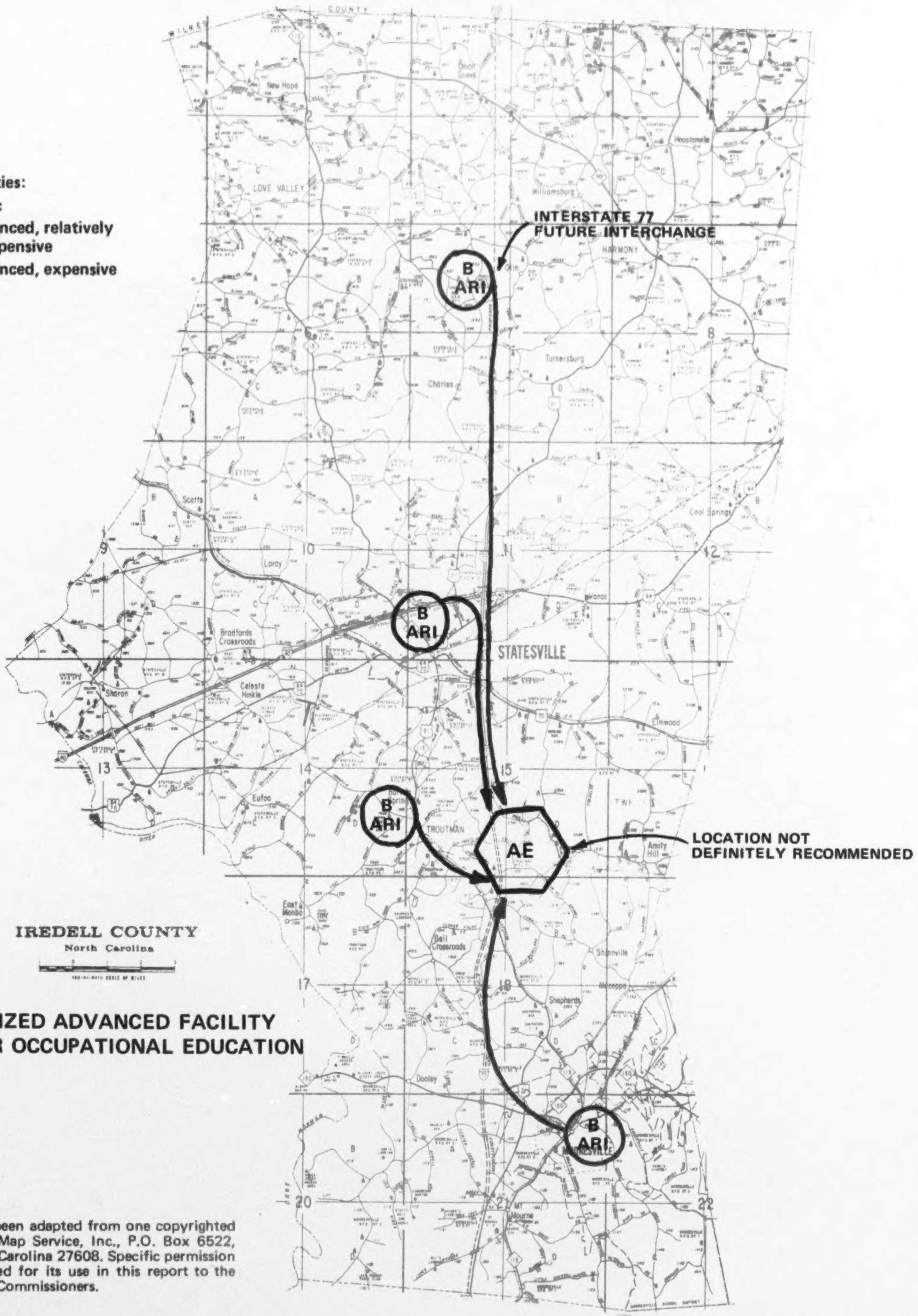
Your consultants recommend the construction of a centralized facility to include only advanced and expensive facilities for concentrated specialization courses. Other courses would be given at the local high schools. Cooperative Training Programs can supplement advanced instruction at the employer's site of business; such programs are economical and have up-to-date experiences.

The site of the centralized facility should be near Interstate Route 77 to facilitate busing from the high schools. Location near Interstate 40 is not important since no high schools are located on that route. Location in the southern portion of the County would place it in the seat of population and would allow a northern counterpart to be constructed in the future.

---

*For instance, the physics teacher may wish to expose his students to equipment in the air conditioning-refrigeration program.

Key to facilities:
B = basic
ARI = advanced, relatively inexpensive
AE = advanced, expensive

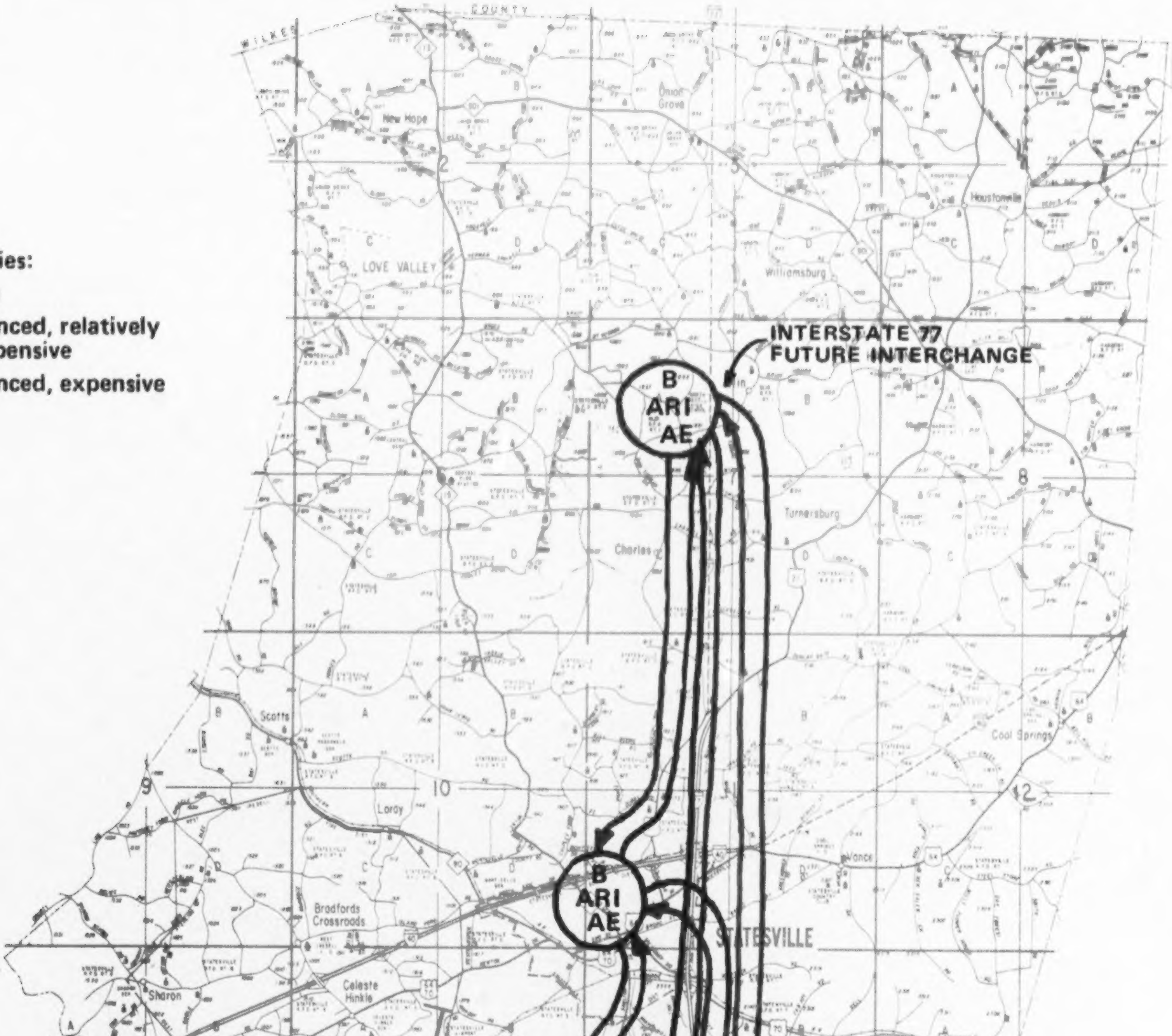

INTERSTATE 77 FUTURE INTERCHANGE
B ARI
B ARI
STATESVILLE
B ARI
AE
LOCATION NOT DEFINITELY RECOMMENDED
B ARI
New Hope
Love Valley
Williamsburg
Harmony
Houstonville
Turnersburg
Charles
Scotts
Loray
Cool Springs
Brodfords Crossroads
Sharon
Celeste Hinkle
Elmwood
Eufoa
Troutman
Amity Hill
East Monbo
Bell Crossroads
Shinnville
Shepherds
Mazeppa
Dooley
Mt Mourne

IREDELL COUNTY
North Carolina

MAP 7
CENTRALIZED ADVANCED FACILITY PLAN FOR OCCUPATIONAL EDUCATION

This map has been adapted from one copyrighted by Champion Map Service, Inc., P.O. Box 6522, Raleigh, North Carolina 27608. Specific permission has been granted for its use in this report to the Iredell County Commissioners.

Key to facilities:
B = basic
ARI = advanced, relatively inexpensive
AE = advanced, expensive


WILKES COUNTY
INTERSTATE 77 FUTURE INTERCHANGE
B
ARI
AE
New Hope
Union Grove
Houstonville
LOVE VALLEY
Williamsburg
Turnersburg
Charles
Scotts
Cool Springs
Loray
Bradfords Crossroads
STATESVILLE
Sharon
Celeste Hinkle
Elmwood
Eufola
Barium Springs
TROUTMAN
Amity Hill
East Monbo
Bell Crossroads
Shinnville
Mazeppa
Shepherds
Dooley
MOORESVILLE
Mt Mourne
IREDELL COUNTY
North Carolina

MAP 8

DECENTRALIZED ADVANCED FACILITY PLAN FOR OCCUPATIONAL EDUCATION

This map has been adapted from one copyrighted by Champion Map Service, Inc., P.O. Box 6522, Raleigh, North Carolina 27608. Specific permission has been granted for its use in this report to the Iredell County Commissioners.

The County now owns two properties suitable for a centralized facility: The Unity School and the old County Home property. There would be an advantage to erecting a brand new building for occupational education on a southern site. It need not be placed on present County property; a trade of property or compensating sale could possibly be made. The Unity School property will eventually be extremely valuable because of its location near the crossroads of two interstate routes. If not sold, the County's sheltered-vocational workshop (as a joint special education, vocational rehabilitation and occupational program) could use these facilities. Child care occupational programs could also be located here. It is advantageous for special education and child care programs to have easy east-west access as well as north-south access. (This is not the case with the centralized occupational facility.)

What Types of Courses Are Recommended?

The current programs of Industrial Cooperative Training and Distributive Education (D.E.) which now are the largest programs of vocational education in the County, will be the capping stone to most programs offered. Cooperative Office Occupational Programs should also offer practical experience on the job. Although coordinators will be needed, follow-up on the job may be done by specialists in the job area. There will be more students on jobs during their twelfth grade year, but fewer lower classmen because schools will be giving in-house training. (Distributive Education may be an exception in the general sales area.) The nature of cooperative training may change so as not to be attractive solely because students get paid; experience to gain marketable skills is the key attraction of our future cooperative training program. For those students needing money, a work-study program on less skilled jobs can be started; this program requires less supervision by the school and does not usually lead to high paying jobs. Cooperative training programs should be combined in all three areas - industrial, commercial, and business-office - under one cooperative training coordinator. Work-study programs may be under another agency, such as guidance. The program of studies to be offered must be finalized by the Director of Occupational Education, the advisory council, and a planning council as suggested in the State's Handbook for Use in Planning Occupational Education Programs. Your consultants will suggest consideration of certain areas for instruction. Employment opportunities shift as one produces graduates. Some programs should be phased in and out of the curriculum as demand varies for graduates. One also notes that some courses contain a cluster of occupations, enabling the graduate to adapt to shifting labor demands. Other courses start out as isolated occupations, but may eventually develop into a cluster. The nature of the staff and director, plus the state of vocational analysis, will determine the degree of clustering available.*

Introductory or Survey Courses

In the State of North Carolina, the phrase "introduction to vocations" has specific meaning. It refers to a choice of three specific courses given at the ninth grade level:

Introduction to Vocations - 7001
Home Economics 1-711.1 or 711.2
Introduction to Agriculture - 701

---

*Clusters can be based on abstract aptitude similarity, not outward skill similarity. For instance, machine shop and surveying may be clustered on the basis of aptitude for mathematics. Such theoretical clustering has its problems at the moment.

Modification of this specific implementation may be desirable for the following reasons:

1. Every introductory course should be geared to giving a well rounded picture of occupational roles in our society; this picture must erase any old ideas of sex roles. An example of this is the increasing employment of women in cabinetmaking and milling operations. Although Introduction to Agriculture is a suitable preparation for cabinetmaking, it is probable that girls will not be shown this occupational opportunity if vocational agriculture is the only introductory option aside from home economics.

2. In agricultural areas like North Iredell, the detailed expertise used in teaching Introduction to Agriculture is needed. This course has proved useful as a substitute for industrial arts and as a needed prerequisite for more advanced shop work; its graduates fit well into nonagricultural occupations. School systems offering this course (701), however, should broaden the curriculum (within or apart from the existing course 701) to accommodate students interested in areas not closely allied to agricultural concerns such as health occupations, textile manufacture (including synthetics), large-scale transmission and generation of power, transportation routing, etc. It would not be difficult to restructure the agriculture program to involve more girls and include a complete spectrum of occupations. Agriculture is so broad in interests that a few other topics could be easily included. Possibly the feeder schools to North Iredell High School could begin the Introduction to Vocations courses in eighth grade, allowing the successful shop course in 701 to be given. Membership in Future Farmers of America should be required not only for those seriously thinking of agriculture as an occupation but should be open to all as an excellent training ground for citizenship and avocational interests.

3. In the existing home economics courses, needed homemaking skills are being taught, but proper aids and sophisticated planning are lacking to give girls career guidance. Girls and boys need skills associated with maintaining a family and house, but there is not enough time to teach these and a survey of occupations in one year. Future Homemakers of America is essentially not an occupationally-oriented club as is Future Farmers of America.

4. It is very possible that the State is trying to accomplish too much in one year (ninth grade) in its Introduction to Vocations. Home Economics is not the only introductory course caught in a time dilemma. Agriculture 701 gives basic shop safety and skill instruction which enables eventual attainment of home maintenance skills; it is tightly scheduled to give a broad picture of occupational opportunities in modern society along with elementary management skills. Introduction to Vocations must be modified in order to train in home maintenance skills; Mooresville has achieved a rather successful modification. It is apparent that one year is too short a time to do a successful job in teaching basic skills, awareness of job opportunities in our nation, and economic literacy.

   North Carolina's ninth grade course in Introduction to Vocations has many worthy goals. The course will be most productive if it has been prefaced with an elementary and middle school program involving economic and occupational education. The high school should develop marketable skills and the general survey courses should be eventually given in the middle school or junior high school. Guidance is also a function of the high school occupational curriculum, but here the guidance is a product of specialized in-depth experiences.

5. Active involvement in addition to vicarious experiences should be part of the survey or introductory courses. Mooresville's adaptation of the State's Introduction to Vocations course appears to present some excellent experience for the County.

We suggest an inclusion of occupational education in grades one through eight. Economic theory is being taught elsewhere in the primary and intermediate grades. Occupational awareness can be seeded in elementary and middle school grades and be strengthened with active experience in eighth and ninth grades.

Exploratory Courses (Tenth Grade)

Exploratory courses offer practical skills and knowledge in certain areas. (The term "exploration" is used technically in North Carolina education; it refers to tenth grade introduction to clusters of occupations.) In some instances, the existing course syllabuses in the State may not give detailed training. When possible, specific training should begin at this grade level. For instance, the current one period course, Introduction to Industrial Education, could be given along with a course in drafting and woodworking. The student must be given a chance to experience success and failure with various areas in order to pick his specialization in eleventh grade. These courses could be given in the facilities listed as recommended for specialized courses. The exploratory course for a cluster of occupations could involve the facilities used by students in that specialization.

Specialization Courses and Clusters

"Specialization" is a technical term in North Carolina for advanced junior and senior year courses in occupational education. Where at all possible, specialization courses should be open for five- to ten-year period students without prerequisites in occupational education. For instance, agricultural chemicals 705.8 should be open to anyone having biology and chemistry, but not agri-science and mechanics 702. Safe behavior is often given as a reason for prerequisites. Provision should be made to avoid the necessity for a full year's prerequisite course to teach safety requirements. The acquisition of safety skills could be a common course in the introductory phase or could be given in a few weeks, prior to entrance into the full course.

With the entrance of the five- to ten-period student into these courses, there are actually two courses for each of the State-suggested specialization courses:

1. Concentrated specialization
2. Acquaintance specialization

Acquaintance specialization courses will be taught to any individual student for a shorter period of time than concentrated specialization courses, but the shops and topics will be much the same. For instance, an eleventh grade college preparatory student may elect an introductory course in bricklaying-masonry or a construction trades cluster; he will receive enough training to do home repairs and minor construction. In the same shop a half-day student will be perfecting his skills and possibly teaching the five- to ten-period student who is taking it as an acquaintance course.

We suggest the following offerings for job-entry skills and general education:

Human Services Cluster

Occupational Objectives:

Vocational entrant:

- Nursery school and primary school aides
- Day care center worker
- Nurse's aide
- Recreation aide
- Geriatric care worker
  - - - aide in geriatric hospital or convalescent home
  - - - resident or nonresident companion for elderly people at home

Prevocational or Preprofessional:

- Licensed practical nurse
- X-ray technician
- Laboratory technician (with chemistry)
- Registered nurse
- Medical receptionist (with some business)
- Dental assistant
- Dental hygienist
- Physical therapist
- Teacher
- Mortician

Program Notes:

This program will concentrate on vocational entrants, but these students may wish to further their education at a technical institute, hospital, or college. The program will deal with care of young children and care of the elderly. Aside from theory courses in psychology, geriatric care can be taught in a cooperative training program. Child care might be taught in a centralized facility if a vacant, convenient building is available. The best location is adjacent to the comprehensive high school so that an acquaintance course in child care can be given. Nurse's aide training may also involve cooperative training. Space needed: for 10 high school students (not all present in room at once - some observe, etc.) and 15 to 20 students, we suggest 1,200 square feet. A small, fenced-in outdoor playground is needed. Office and preparation area may be 800 square feet.

Estimated Cost:

$45,000 per unit; at least $10,000 of this is equipment. This will serve 20 half-day students per year, or 10 half-day and 80 five-period (one-half year) students per year.

Location:

Unity, Mooresville Junior High School, and South Iredell.

Textile Cluster (limited to manufacturing - no research)

Occupational Objectives: (illustrative, not complete)

Industry is not yet ready to specify specific occupations in this facility. It will supply the equipment to duplicate textile manufacturing operations. The size and details of training should be worked out with local industry. The cluster operates under U. S. Office of Education instructional program code 17.3399 which can involve the following occupational objectives:

DOT Code	Occupational Title	DOT Code	Occupational Title
580.782-014	Weft straightener	681.885-034	Doubling-machine operator
582.782-030	Slasher tender	681.885-038	Gas-reel tender
587.886-010	Hebdon-machine-sponger-helper	681.885-042	Long-chain beamer
		681.885-046	Precise winder
680.885-022	Comber tender	681.885-054	Quilling-machine operator, automatic
680.885-034	Drawing-frame tender		
680.885-038	Finisher-cord tender	681.885-106	Thrower
680.885-066	Picker tender	681.887-010	Warp boy, sorting
680.885-074	Picking machine operator	682.137-010	Foreman, spinning
681.137-010	Foreman, preparation dept.	682.887-010	Traveler changer
681.137-014	Foreman, winding and twisting department	683.280-018	Loom fixer
		683.380.014	Loom changer
681.280-014	Machine fixer	683.380-018	Loom starter
681.685-010	Covering-machine-operator-helper	683.384-010	Pattern-lease inspector
		683.781.010	Chain builder, loom control
681.687-010	Thread inspector	683.782-050	Weaver apprentice
681.687-014	Yarn examiner	688.387-010	Cloth grader
681.782-010	Dresser tender	689.384-010	Cloth tester, quality
681.885-010	Ball-warper tender	781.687-014	Cloth examiner, hand
681.885-018	Beamer	781.884-034	Cutter, rotary shear
681.885-030	Covering-machine operator		

Although this list is not exhaustive, it approaches being exhausting. If the apparel industry is considered, the list may be expanded with sewing machine operators, cutters, and others. Whether or not to distinguish between these occupations is a decision for the industrial advisory committee. Another method for classification is using Worker Trait Groups. Within the textile industry the following groups exist (occupational codes from the above list are given as examples).

Worker Trait Group	Example DOT Code
Operating-controlling	580.782-014
Feeding-offbearing	587.886-010
Tending	680.885-022
Set-up or machine operator	681.280-014
Supervisory	681.137-014
Inspection and stock clerk	688.387-010
Sorting, inspection, related work	781.687-014
Precision work	683-781-010
Handling	682.887-010
Manipulating	781.884-034

The Employment Security Agency may offer help in sorting out aptitude clusters associated with worker trait groups.

Program Notes:

A cooperative training program might be an outgrowth of limited opportunity of the centralized facility. The centralized facility would cultivate a knowledge of the industry and entire operation necessary for eventual promotion to middle management levels.

The North Carolina Department of Public Instruction recognizes three textile courses at the moment:*

#7390 Textile Industry
#7883 Industrial Textiles
#7884 Industrial Textiles

Estimated Cost:

$20,000 for a prefabricated building to house equipment possibly donated by industry.

Location:

The centralized facility

---

*Division of Vocational Education, North Carolina Department of Public Instruction, Vocational Education Opportunities for North Carolina Public Schools 1969-70, p. 15.

Agricultural Cluster

Occupational Objectives: (illustrative, not complete)

Vocational entrant:

- Business manager
- Farm manager
- Agricultural construction (machine installer, carpenter, electrician, plumber, mason, bricklayer)
- Equipment repair technician
- Dealer, salesman - farm equipment
- Small motor repair technician
- Nursery worker, foreman
- Landscaper
- Greenhouse manager
- Florist
- Forester aide, technician
- Greensman
- Veterinary assistant
- Feed salesman
- Agricultural supply salesman
- Poultryman, poultry breeder
- Farm hand, dairy
- Vegetable grower
- Meat and food processor, slaughterer
- Harvest contractor
- Exterminator

Prevocational or Preprofessional:

Farmer
Laboratory technician
- - veterinary
- - soil analysis
- - food inspection, pesticide residues
Veterinarian
Livestock and meat inspectors
Forestry vocations
- - wood technologist
- - forester (private)
- - ranger (government)
Conservation vocations
- - soil conservationists
- - hydrologists
Rural sociologist
Home economist
Agricultural economist
Plant physiologist
Ecologist

Program Notes:

It is evident that the type of vocational entrant occupation listed has limited job openings, although prevocational and professional preparation leads to more open careers. The ability of vocational agriculture graduates to adapt to vocations tangential to their training has proved that this program can be supported by enrollees for whom no agricultural job opening exists. The program should be provided to service what is still a significant factor in the economy and life style of Iredell County. The agriculture department is looked upon as one resource for information and technique demonstration by adult farmers in the area. The new entrants into agriculture are willing to learn more from agricultural teachers than from fathers - a natural situation which is an important aspect in a family-dominated agricultural community. By State directive, "adult farmer education is the responsibility of agricultural teachers. These teachers must be given time and resources to conduct such adult education."*

The consultants found sufficient evidence that suggests that in North Iredell, the need exists for such a full agriculture program. The program should be considered from several aspects:

1. Preparing students for job entry
2. Upgrading aptitudes and attitudes for diverse jobs
3. Providing avocational skills and knowledge
4. Preparing students for entry into agricultural programs of four- and two-year colleges such as Wilkes Community College programs in food processing, agri-business, and agricultural equipment.

The program must be flexible so as to guide the inevitable changes in the region's agriculture. Dairying will probably remain strong, but poultry and hog farming are rapidly becoming a major aspect of agriculture in the County. Beef production is a strong avocational or part-time activity. Perishable vegetable and fruit growing may become economically advantageous as the population increases. Suburban application of agricultural skills in nursery and landscaping will also be an increasingly profitable venture.

The landscaping and nursery program could operate out of South Iredell High School (as well as North) and be given by an itinerant teacher at Statesville and Mooresville. The school system's property could serve as practice area for students in the course. Nursery stock could be grown at South Iredell High School. The market for such skills will be pronounced in the southern portion of the County.

Eventually, the horticulture program could supplement the biology curriculum in all schools so that science became a process of inquiry and experimentation rather than a depository of knowledge. Greenhouses or artificially lighted growth rooms could be added to all high schools. Rather than pure avocational instruction without scientific theory, these facilities should allow botanical experimentation. The technical knowledge of the present agriculture teachers could serve the science department. This infusion of occupational education into academic subject areas will take time and organization.

---

*ibid., p. 3. The same statement applies to home economics.

Estimated Cost:

Presently being operated, but additional facilities should be built by agriculture students, with costs of materials being borne by system. Some equipment might also be purchased. Approximately $18,000.

Location:

Complete program: North Iredell High School with a cooperative training program in North Iredell Farms.

Landscaping, nursery: Itinerant from South Iredell High School.

Automotive Industry

Occupational Objectives:

Vocational entrant:

- Used car renovator
- New car get-ready man
- Shop and insurance estimator
- Automobile body repairman
- Painter, automobile
- Automobile mechanic
- Front-end man
- Tune-up man
- Radiator man
- Electrician, automotive
- Stock clerk - parts man

Prevocational or Preprofessional:

- Transmission mechanic
- Aircraft and engine mechanic
- Diesel mechanic
- Truck driver
- Bus driver

Program Notes:

Several State-approved programs of studies are in existence:

Course No.	Title
7511-7512	Auto body and fender repair
7521-7522	Automotive engine tune-up
7531-7532	Automotive mechanics
7541-7542	Internal combustion engines
7544	Service attendant - automotive
7545	Service specialist - automotive
7310	Automotive industry

U. S. Office of Education instructional program codes 17.03, 17.0301, and 17.0302 have the following descriptions suitable for our program:

Automotive Services

Instruction in general provides classroom and shop experiences which include training in all phases of automotive maintenance repair work on all types of automotive vehicles. Included is training in the use of technical manuals and a variety of hand and power tools. Instruction and practice are provided in diagnosis of malfunctions, disassembly of units, parts inspection, and repair or replacement of parts involving engine overhaul and repair, ignition systems, carburetion, brakes, transmission, front end alignment, body and fender repair, and the installation of a variety of accessories such as radios, heaters, mirrors, and windshield wipers.

Body and Fender

Instruction in work provides specialized learning experiences concerned with all phases of the repair of damaged bodies and fenders, including metal straightening by hammering; smoothing areas by filing, grinding, or sanding; concealment of imperfections; painting; and replacement of body components, including trim.

Mechanics

Instruction in auto provides learning experiences concerned with the components of the vehicle, including engine, power transmission, steering, brakes, and electrical systems. Included is training in the use of diagnostic and testing equipment and tools used in the repair process.

Estimated Cost:

Approximately $75,000 (construction and equipment) for 40 half-day students per year. An additional specialized body and fender work course could be offered for relatively slight increase in cost.

Location

At the centralized facility

Machinist Training and Machine Drafting

Occupational Objectives:

Vocational entrant: (by worker trait group only)

- Set-up or machine operator
- Drafting and related work
- Crafts and related work
- Manipulating
- Operating-controlling
- Precision work
- Inspection and stock clerk
- Tending

(Occupational titles can be found elsewhere)*

Preprofessional (U.S.O.E. Code 16.011302 and 17.13):

Tool designer (DOT Code 007.081-066)
(Engineering research and design worker trait group)
Die designer (DOT Code 007.181-014)

Program Notes:

Local industry should guide this program closely and may possibly donate some equipment. Aptitude training with general skills is the product of this shop. Specific skills are polished with the ancillary specialization which is part of the drafting and design curriculum, but on-the-job training should be used for polishing skills of machinists. The U.S.O.E. instructional program in machines shops gives specialized classroom and shop experiences concerned with all aspects of shaping metal parts. Instruction involves making computations relating to work dimensions, tooling, feeds, and speeds of machining. Also emphasized are: work on the bench and on lathes, shapers, milling machines, grinders, and drills; uses of precision measuring instruments such as layout tools, micrometers, and gauges; methods of machining and heat treatment of various metals; blueprint reading; and the layout of machine parts. Instruction prepares the pupil to operate and repair many machines. Related work may occur in the textile shop.

---

*Office of Education, U. S. Department of Health, Education and Welfare, Vocational Education and Occupations - OE80061, 1969, pp. 149-154.

North Carolina has approved courses relating to this program:

Machine Design - 7654
Machine Shop - 7911-12

Estimated Cost:

Approximately $125,000 for building and equipment - could easily be more.

Location:

At the centralized facility

Drafting and Design Curriculum

Occupational Objectives:

Vocational entrant:

- Electrical draftsman
- Sheet metal, heating, air conditioning draftsman
- Furniture draftsman
- Interior design draftsman
- Architectural draftsman for printers and general firms using visual aids, graphic arts worker
- Pattern grader (apparel)
- Pattern maker (apparel)
- Layout, marking, cutting (textile)
- Landscape draftsman
- Surveying and plot planners - topographical draftsman

Prevocational and Preprofessional:

- Engineer
- Designers, interior, furniture, textile, landscape
- Architect
- Estimator and draftsman - DOT Code 003.281-022
- Design checker - DOT Code 007.187-010
- Mining draftsman - DOT Code 010.281-026

Program Notes:

The drafting and design curriculum can work in conjunction with courses being offered at all high schools. The drafting and design curriculum emphasizes what it can do in each school. For instance, South Iredell may be the only school giving landscape design instruction in conjunction with its vocational agriculture course in landscaping. North Iredell may be able to do more with the topographical drafting instruction in conjunction with terracing and contour plowing units. (It is suggested that vocational agriculture and the construction course in Mooresville introduce students to surveying where personnel exist who can teach the skill.)

Statesville has existing facilities to implement a team taught course in most areas. Mooresville may wish to give the only textile design unit. The centralized facility will offer machine drafting and design in conjunction with its machine shop.

Chart 17 illustrates the suggested sequence of courses. A large number of college preparatory students will take these courses. The courses will be taught in small groups meeting simultaneously in preferably large rooms allowing 40 students and two instructors.

The State-approved course, 7250, Commercial Art (Distributive Education) would fall under this program.

Estimated Cost:

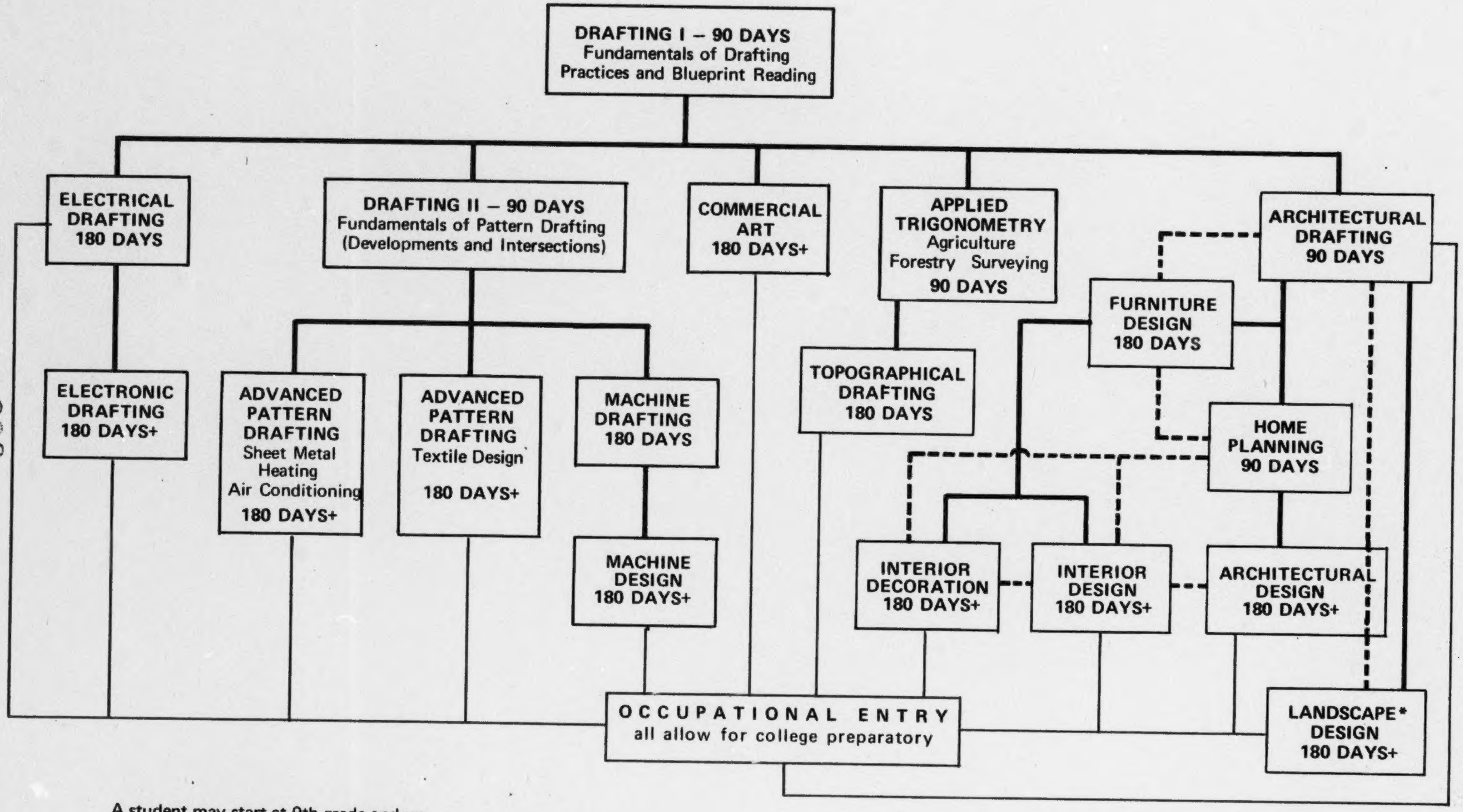
Use existing facilities, add some equipment - $5,000. A unit for 40 students may cost $18,000 to build.

Location:

At each high school and the centralized facility.* Topographical and surveying - North Iredell and Mooresville. Landscaping design - South Iredell. Textile design - Mooresville.

---

*Expense for centralized facility included in machine shop cost.


DRAFTING I – 90 DAYS
Fundamentals of Drafting
Practices and Blueprint Reading
ELECTRICAL DRAFTING 180 DAYS
DRAFTING II – 90 DAYS
Fundamentals of Pattern Drafting
(Developments and Intersections)
COMMERCIAL ART 180 DAYS+
APPLIED TRIGONOMETRY
Agriculture
Forestry Surveying
90 DAYS
ARCHITECTURAL DRAFTING 90 DAYS
FURNITURE DESIGN 180 DAYS
ELECTRONIC DRAFTING 180 DAYS+
ADVANCED PATTERN DRAFTING
Sheet Metal
Heating
Air Conditioning
180 DAYS+
ADVANCED PATTERN DRAFTING
Textile Design
180 DAYS+
MACHINE DRAFTING 180 DAYS
TOPOGRAPHICAL DRAFTING 180 DAYS
HOME PLANNING 90 DAYS
MACHINE DESIGN 180 DAYS+
INTERIOR DECORATION 180 DAYS+
INTERIOR DESIGN 180 DAYS+
ARCHITECTURAL DESIGN 180 DAYS+
OCCUPATIONAL ENTRY
all allow for college preparatory
LANDSCAPE* DESIGN 180 DAYS+

A student may start at 9th grade and up.
Exceptions might be made for 8th graders showing talent.
Individualization allows flexibility for particular students in regard to time.
Time duration based on one period per day.

*Landscape designers would profit from a vocational agriculture program.
This leads to a five-year college program in North Carolina.

CHART 17

DRAFTING AND DESIGN CURRICULUM

FOR IREDELL COUNTY, NORTH CAROLINA

Engelhardt and Engelhardt, Inc. – Educational Consultants

Construction Trades Cluster

Occupational Objectives:

Vocational entrant:

Note: The approved programs of studies for this cluster in North Carolina are self-explanatory as to entrant objectives. They are listed below:

- Construction industry (7330)
- Bricklaying (7611-12)
- Cement finishing (7613)
- Carpentry (7631-32)
- Painting and decorating (7641-42)
- Plumbing (7671-72)
- Electrical installations - residential (7743)
- Electrical installations - commercial (7744)
- Sheet metal (7921-22)

Program Notes:

Cooperative training may add specialization. Many students will enter the apprenticeship programs. We would anticipate high acquaintance specialization courses. Agricultural construction is an excellent survey course of related nature for ten-period students. Blueprint reading is a needed skill, possibly learned in conjunction with the drafting and design program. Facilities should allow practice during inclement weather in order to attract visiting consultant help which is hard to place on full-year status.

Estimated Cost:

$35,000 - to house an indoor concrete slab area of at least 4,500 square feet for erecting buildings. This could train 40 half-day students per year. Some existing facilities could be used.

Location:

At most high schools. Agricultural construction may substitute for this at North Iredell except when training becomes very specialized (such as just electrical installation for one year) at other schools.

Cabinetmaking, Custom Carpentry
(Office of Education Instructional Program Nos. 17.001, 17.3601, and 17.3699)

Occupational Objectives:

Vocational entrant:

- Carpenter, maintenance
- Boat builder, wood
- Cabinetmaker
- Furniture finisher
- Assembler (762.884-010)
- Cabinet assembler (762.884-030)
- Repairman (769.884-022)
- Furniture assembler (763.884-034)
- Mobile home installer (806.884-078)
- Door assembler (762.884-038)
- Various woodworking machine operators
- Wood products repair craftsman

Program Notes:

This program should contain elements of home maintenance and remodeling as well as shop and classroom experience in mass production phases of work. Furniture repair and custom carpentry done on an individual basis (such as custom kitchen cabinetry) is a marketable skill. Usual programs involve classroom and shop experiences concerned with the woodworking occupations other than constructive carpentry. Instruction emphasizes laying out and shaping stock; assembling complete wooden articles or subassemblies; marking, binding, sawing, carving, and sanding wood products; and repairing wooden articles. Also emphasized are various hand and power tools and their uses.

Mill work and cabinetmaking specifically provide for specialized class and practical work experiences concerned with mass production of products such as window frames, moldings, trim, and panels; and with making such products as furniture, store fixtures, kitchen cabinets, and office equipment. Instruction includes training in cutting, shaping, and assembling parts by means of hand tools and woodworking machines; refinishing furniture; installing hardware - e.g., hinges, catches, and drawer pulls; planning layouts; blueprint reading; drafting; and features of various kinds of woods. Cooperative training programs will acquaint students with specialized procedures under highly skilled workers.

Estimated Cost:

$38,000 per unit, cooperative training to lessen cost in Statesville and North Iredell. Upholstery may be added eventually to this cluster.

Location:

South Iredell, North Iredell, Mooresville, and small installation at Statesville.

Small Appliance, Heating, Ventilating, and Air Conditioning Service Cluster

Occupational Objectives:

Vocational entrant:

- Small motor repair mechanic
- Dealer, service manager in retail establishment
- Household and farm appliance installer
- Oil burner installer and serviceman
- Air-conditioning mechanic, domestic
- Air-conditioning mechanic, commercial
- Air-conditioning mechanic, automobile
- Refrigeration mechanic
- Furnace installer
- Humidifier attendant (textile, tobacco)
- Household appliance repairman
- Electrical appliance serviceman
- Plumber apprentice

Prevocational and Preprofessional:

- Aircraft mechanic, heating and ventilating
- Engineer

Program Notes

The following U.S.O.E. instructional program descriptions suggest suitable programs. Your consultants heard much vocal support for increased training of servicemen in the area. This cluster prepares a graduate to adapt in the event of a possible labor surplus in one area (such as oil burner serviceman). No student should specialize in only a limited skill repertoire. The facility may alternate instruction every other year or it can be team taught.

Air Conditioning (U.S.O.E. Code 17.01)

Classroom and shop experiences which enable the student to become proficient in the installation, repair and maintenance of commercial and domestic air conditioning systems. Included is instruction in the theory and application of basic principles involved in conditioning of air - cooling, heating, filtering, and controlling humidity; the operating characteristics of various units and parts; blueprint reading; the use of technical reference manuals; the diagnosis of malfunctions; the overhaul, repair, and adjustment of units and parts such as pumps, compressors, valves, springs, and connections; and the repair of electric and pneumatic control systems.

Cooling (U.S.O.E. Code 17.0101)

Learning experiences specifically concerned with the installation, operation, testing, and troubleshooting of various types of air cooling equipment and of the controls needed for operation.

Heating (U.S.O.E. Code 17.0102)

Learning experiences specifically concerned with the installation, operation, testing, and troubleshooting of various types of heating equipment, including the controls needed for operation.

Ventilating (Filtering and Humidification) (U.S.O.E. Code 17.0103)

Learning experiences specifically concerned with the installation, operation, testing and troubleshooting of various air quality control equipment such as humidifiers, filters, fans, and related equipment.

Air Conditioning, Other (U.S.O.E. Code 17.0199)

Include here other specialized subject matter and learning experiences emphasized in air conditioning, refrigeration and heating which are not listed or classifiable above. (Specify.)

Appliance Repair (U.S.O.E. 17.02)

Classroom and shop experiences concerned with the theory of electrical circuitry, simple gearing, linkages, and lubrication in the operation, maintenance, and repair of components including relays, time switches, pumps, and agitators used in appliances such as washers, dryers, vacuum cleaners, toasters, water heaters, and stoves. Related training is provided in the use of familiar tools, test equipment, and service manuals, and in making cash estimates for repairs.

Electrical Appliances (U.S.O.E. Code 17.0201)

Learning experiences specifically concerned with the repair, installation, and servicing of electrical appliances.

Gas Appliances (U.S.O.E. Code 17.0202)

Learning experiences specifically concerned with the repair, installation, and servicing of gas appliances.

Existing State-approved courses are:

7543	Gas engine repair - small
7931	Welding
7921-22	Sheet metal (overlap with construction)
7885-86	Air conditioning and refrigeration
7732	Appliance repair service - residential
7712	Basic electricity

Physics students may wish to use some of the air conditioning and refrigeration training set-ups. Practical application of physical laws in fluids and electricity is engaging.

Estimated Cost:

$40,000 - 20 half-day students and 40 five-period students a year.

Location:

Statesville; it should be near academic classes and near cooperative training program employers.

Distributive Education

Although this applies to many of the new programs, the existing program is justified in its own right. It should continue as at present but may have fewer students. Students who would have formerly gone into distributive education will probably enter some other areas.

Business and Office Education Cluster

This "cluster" is one of the largest in the occupational education program and might be managed as a subdepartment.

Occupational Objectives:

Vocational entrant:

- Bookkeeper
- Teller, bank
- Machine operators, billing, bookkeeping, computing
- Payroll clerk
- Keypunch and coding equipment operator
  - - - Keypunch operator
  - - - Verifier operator
  - - - Tabulating machine operator
  - - - Sorting machine operator
- Duplicating machine operator
- File clerk, document and information retrieval
- Billing clerk
- Statistical clerk
- General office machine operator
- Typist, clerk typist
  - - - General
  - - - Statistical
- Receptionist
- Switchboard operator
- Library assistant
- Secretary
- Stenographer
- Stock and inventory clerk

Prevocational and Preprofessional:

- Entrepreneur
- Accountant
- Executive secretary
- Legal secretary
- Medical secretary
- Court reporter
- Programmer
- Systems analysts
- Statistician

Program Notes:

This program should be funded so that experience with equipment is broad and all students have opportunity to enroll. The data processing training should utilize facilities connected with the management of the school system and the County. The status of the secretary in today's business world should be explained in a convincing manner to parents and girls alike. Girls, previously bound for college, may wish to prepare for entrance into the business world. Cooperative training programs should be started in office occupations, and Distributive Education should be used as a capstone to some occupation programs in the senior year, such as in bookkeeping-banking (teller).

Statesville has the beginnings of an excellent "executive secretary" preparation program to train secretaries rather than clerk-typists. This type of program should be expanded. Increased attention should be given in other programs to information retrieval problems to prepare personnel to organize file systems and small libraries in conjunction with modern national library resources. The excellent libraries in the County could offer aid in this area.

For other occupational half-day students, the business courses might prepare students for running their own small business. Bookkeeping and small-business financing should be taught to those possessing service-oriented skills such as appliance repair. Business law might also be taught.

Estimated Cost:

Plant mostly exists

Location:

Each high school

Home Economics Cluster

Occupationally-oriented courses (those geared to gainful employment) are only beginning in Iredell County. The State has recognized courses in these areas:

714.9	Home Furnishing Service
714.2	Health and Management Services
714.5	Child Care Services
714.3	Food Services
714.4	Clothing Services

Program Notes:

Where a need has been established for workers in these areas, your consultants suggest creating a separate program in each area. It is our opinion that home economics should remain a cluster oriented to consumer education and parental and home maintenance skills. It should be pointed out that home maintenance skills can include avocational skills which can save or increase family income - such as the making of clothes. Units can be spent as five- to ten-period students in occupational programs as in child care.

The guidance of girls into vocations should be handled through Introduction to Vocations, not solely or predominantly through home economics. With a revision in the female role, home economics may be the last bastion of femininity in the curriculum. Therefore, the introductory course in home economics probably should not deal with the same topics as a course which would acquaint girls with occupational opportunities, since many previously male occupations are now open to women.

Estimated Cost:

Facilities exist

Location:

Each junior and senior high school

Other programs for future consideration in areas such as tailoring-cleaning, the hotel-motel industry, food preparation, transportation industry, and apparel industry, should be considered after the recommended courses have had some success.

Implementation of an Occupational Program

The major emphasis of the Iredell occupational program should be in the elementary and secondary years of education. In regard to post-high school education, the surrounding institutes and colleges offer adequate faculty and funding avenues. Effort should be made to have seniors eligible for evening or afternoon courses. Mitchell College may have its best role in science technology and business curriculum. No new construction is recommended. The Statesville adult education program is highly successful in using secondary facilities for extension courses of neighboring institutions. Any extension course should be operated under the jurisdiction of the director of occupational education, when that course produces individuals with job-entry skills. Of course, a general adult education coordinator is also needed; this position is already being served part time in Statesville.

The most important step in upgrading a vocational program is to appoint a Director of Occupational Education. In advance of instituting any changes in the existing program, this director should be employed. In consultation with local and state officials, he should appoint an Occupational Advisory Committee* which should at least include representatives from industry, unions or trade associations, small service business, professionals, agri-business, practicing farmers (Farm Bureau, Grange, etc.), Agriculture Extension Service, Employment Security Commission, commerce, higher education, local-county government, and professional public school educators. The Advisory Committee may appoint ad hoc subcommittees to investigate employment potential and needed job skills in certain areas. Such ad hoc committees may actually suggest curricula and equipment needed for courses. The director and his advisory committee actually submit new course plans and project proposals to the State through the local board of education.

In conjunction with this first step, it is apparent that a consolidated program of occupational education makes sense. Separate advisory committees for the County, Statesville, and Mooresville would:

1. Waste advisory committee members' time
2. Lead to uncoordinated decision
3. Confound and introduce competition into training programs
4. Waste the director's energy

The second step in implementing the occupational program is to start with effective but less costly programs. At least, elect only one expensive program. The central facility might start out to be modular or campus plan rather than a large, permanent brick structure. The director should survey popular feeling in Iredell County and calculate what program would receive the most support by students, taxpayers, and employers.

---

*The State also suggests an additional, temporary group called The Planning Council, primarily comprised of professional personnel within the school systems who are concerned with occupational education. See the State's Handbook for Use in Planning Occupational Education Programs, pp. 7-8.

315

It should be reemphasized that the program should serve students as well as employers. Job preparation should not be ruled out solely because that particular type of employer is not based in Iredell County. On the other hand, to educate an emigrating labor force exclusively is not good policy; support for one's program does not remain locally in many such instances. It should be kept in mind that the prevocational and preprofessional aspects in industrial and agricultural occupations are able to gain public backing without looking for return of graduates, just as does academic training.

Individual attention and guidance are hallmarks of a good vocational program. It is suggested that counselors experienced with skilled trades and industry be hired as soon as possible. Until finances allow counselors to be hired, the business community may be willing to participate in sponsoring a guidance staff to explain opportunities to youngsters. The Employment Security Commission in Statesville could coordinate and supplement this venture with battery tests, etc.

Summary and Implications for Consolidation

It has been suggested that the Occupational Education Program for Iredell County cover those courses formerly termed industrial arts, vocational education, home economics, and business education. The curriculum of the Occupation Program will serve several functions:

1. Increase student aptitude for a general area of employment.
2. Give guidance to students looking for a goal in the adult, occupationally-oriented world.
3. Provide specific skills and knowledge for a vocation or avocation.
4. Instill attitudes which bolster the self-image of a worker and create an appreciation for others and their roles in our technological society.

The elementary-through-secondary program should be coordinated (possibly through written agreement) with such 13th- and 14th-year institutions as Catawba Valley Technical Institute, Wilkes Community College, Mitchell College, Rowan Technical Institute, Central Piedmont Community College. Apprenticeship programs should also figure into curricular work. At present, apprenticeships are available in upholstery, sheet metal, auto mechanics, machines, and the construction industry.

The following programs have been suggested:

Introductory - all high schools

Agricultural cluster (comprehensive) - North Iredell

Landscaping only - South Iredell (itinerant)

Human services cluster - Unity, Mooresville, South Iredell

Textile cluster - centralized facility

Automotive industry - centralized facility

Machinist training and drafting - centralized facility

Drafting and design curriculum - all high schools

Topographical drafting and survey subcourse -
North Iredell, Mooresville

Landscaping design - South Iredell

Textile design - Mooresville

Construction trades cluster - all high schools
(North Iredell may give under Agricultural Construction)

Cabinetmaking, custom carpentry - all high schools
(smallest at Statesville)

Small appliance, heating, ventilation, air conditioning
service cluster - Statesville

Business and office education cluster - all high schools

Distributive education - all high schools

Home economics cluster - all high schools

It was recommended that the program begin slowly with the immediate appointment of a director, advisory committee, and possibly a planning council. The combined school districts (with or without consolidation) can apply for a State-subsidized director of occupational education. The advisory committee should be Countywide with linking agents to surrounding labor markets.

A consolidated occupational system for the County has many advantages over the fragmentized structure that exists today. Advantages are:

1. Director and advisory committee would be used efficiently and funded more economically.
2. Systems could easily cooperate to avoid overproduction.
3. Itinerant teachers (such as in landscaping) could be used by all systems.

4. A centralized facility could be built for all students in advanced work.

5. Students could have a broader selection of courses if choice of school were opened to occupational half-day students.

6. The best of talent can be used from all systems in curriculum development and training.

Consolidation of the entire school system would aid in the following ways:

1. Integration of occupational themes into lower grades and academic subjects would be better handled under common authority.

2. The occupational education opportunities to Mooresville and Statesville would be insured. In the foreseeable future, the County system could withdraw from a loose association and support its own director.

3. A shared occupational system leaves its director in an all-important position. It could develop into a separate "empire." If the academic and occupational teachers are under the same superintendent, coordination stands a better chance of materializing. This coordination would be fostered under a consolidated system.